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ENCYCLOPAEDIA ASIATICA

ENCYCLOPAEDIA ASIATICA

Comprising

INDIAN SUBCONTINENT
EASTERN AND SOUTHERN ASIA

Commercial, Industrial and Scientific

By

EDWARD BALFOUR

IN NINE VOLUMES

VOL. IV. H—JANGTANG



COSMO PUBLICATIONS
NEW DELHI **INDIA**

COSMO PUBLICATIONS

24-B, ANSARI ROAD, NEW DELHI-110002.

The present work was originally published with the title "Cyclopaedia of India and of Eastern and Southern Asia" in 1858 and after an edition in 1873, was completely revised in 1884. The present edition which is released with the title 'Encyclopaedia Asiatica,' is a reprint of that revised edition and contains prefaces to First, Second & Third editions, which were not available in the last edition.

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PREFACE TO THE FIRST EDITION

Whilst we find books of reference in most departments of sciences and literature in connection with European countries, daily becoming cheaper and more abundant, those who investigate and seek for information regarding the sources of British India, or any of the Scientific and economic subjects connected with Eastern Countries, still meet with much difficulty and hindrance, owing to the necessity of consulting numerous authors whose works are scarce or costly. And as some inquirers are without the pecuniary means of procuring all the requisite books and Journals, or find it impossible to procure them at any cost, whilst others want leisure or opportunity for such extensive research, it is evident that progress in these branches of knowledge would be greatly facilitated, by collecting and condensing this widely dispersed information, thereby enabling future inquirers to gain some acquaintance with the results of the investigations made by the many diligent and laborious individuals, who have devoted a great portion of their time to collecting information over the vast areas of Southern Asia.

My avocations while employed in India, more particularly in the past seven years, have rendered necessary for me a collection of books of reference relating to India and the East, somewhat more numerous and varied in character than private individuals generally possess ; whilst my employment a Secretary to the Madras Central Committees for the Great Exhibition of 1851, the Madras Exhibition of 1855, the Universal Exhibition held in 1855, in Paris, and the Madras Exhibition of 1857, combined with my duties (since 1851), as Officer in Charge of the Government Central Museums, have brought under my notice a rare variety of Eastern products and subjects of interest; and thinking that, before quitting the countries in which I have dwelt for nearly a quarter of a century, I might, with advantage leave to my successors in a portable form, the notes made on the products of the East that have come under my notice, combined with an abstract of useful information respecting these contained in my books, I have been led to show the results in the present shape.

A work of this aim and character might doubtless fully occupy the life time of several men attainments ; and this Cyclopædia of India and Eastern and Southern Asia, may therefore be regarded only as a first attempt towards the kind of book, the want of which has been long and generally felt. But although fully conscience of its incompleteness in many respects, yet, I trust it may still

be received with all imperfections and omissions, as a useful and opportune addition to Asiatic literature ; at least by those who recognize the greatness of the saying of Emerson, that "the thing done avails, and not what is said about it; and that an "original sentence, or a step forward, is worth more than all the censors"* which may be made by such as are disposed to find fault, or who would demand in a work of this kind, a degree of perfection unattainable on a first trial.

The book is merely a novelty in form, the matter it contains being as old as our possessions in India : it is simply a compilation of the facts and scientific knowledge, which authors and inquirers have been amassing and communicating since then, to one and another and the public. But, "in our time, the higher walks of literature have been so long and so often trodden, that whatever any individual may undertake, it is scarcely possible to keep out of the foot steps of his precursors",† and this Cyclopædia. I may, therefore, avow to be put an endeavour to make generally available, in a condensed form, the information acquired by those who have in any way investigated the natural or manufactured products of Southern Asia, or have at any time made its arts or natural history the subjects of inquiry. Some of those whose writings I have made use of, have long since gone to their account, but many a labourer yet alive may find the result of his labours embodied here ; and I have done this freely, because even those whose writings I have most largely drawn, will acknowledge that the quaint old lines of Chaucer†† still apply with full force; viz. that,

"Out of the old field, as man sayeth,
Cometh all his new corn fro' year to years;
So out of old books, in good faith,
Cometh all this new Sciences that men lere"

Indeed, I have rather sought to collect and condense accurate and well ascertained facts than to present novelties; for originality is but too often unconscious or undetected limitation. Byron, years ago, remarked that all pretensions to it are ridiculous; and a wiser one than Byron has told us that "there is nothing new under the sun." But if there be nothing absolutely new in this work, I hope it may yet be found to contain much which to many was unknown before; and which for want of books, leisure, or opportunity, may have debarred them from learning.

The Cyclopædia is not intended to comprise the whole Science of Botany, nor that of Medicine or Zoology; nor to instruct in all the matters useful in Commerce or the Arts; but, whether examined for information or amusement, the botanist, the medical practitioner, the naturalist and the merchant,

*English Traits p. 5

†Salad for the Social, p. 317

††Ibid, page 321.

may perhaps each find something in it which, from his engagements he did not know before, or though once knowing he may have again forgotten. In both cases, the work may prove useful, since old thoughts are often like old cloths; put away for a time, they become apparently new by brushing up. It would have been better perhaps, had a work of this kind been undertaken years ago, or even now were it made the joint effort of several persons : indeed, to render it in any way complete, would call for the resources at the command of a Government rather than of individuals; but we cannot have every thing at the time we wish, nor in the way we wish, and it is better to have some one undertake it and do it the best way he can, now, than to postpone it to some further indefinite period.

With a view therefore of laying a foundation as a starting point for future inquirers, I now undertake the commencement of a work, towards which I hope to receive from many quarters aid and support as I proceed : being thereby enabled either to produce future enlarged and improved editions of the work my self, placing it, as I hope, within the reach of all, or seeing that task taken up here after, by younger men, with more time and opportunities than are now before me. A dinner of fragments is often said to be best dinner, and in the same way, there are few minds that might furnish some instructions and entertainment, from their scraps, odds and ends of knowledge. Those who cannot weave a uniform web, may atleast produce a piece patchwork; and any items of information sent to me will be very acceptable.

There is another difficulty which inquirers in this country have had to meet and struggle with ; I allude to the many languages and dialects in use in India and Eastern Asia, and subsequently the variety of scientific, national, or even local names, by which the same thing is known. The only means of overcoming this difficulty was to frame a copious index of Contents; for Pope has well said that,

“Index learning turns no student pale,
yet holds the eel of science by the tail.”

This Indexing will add to the bulk of the book, but greatly also to its value as a work of reference; and will be carefully completed.

PREFACE TO THE SECOND EDITION

The first edition with its two Supplements contained 29,870 names and the work was favourably received by the public and press. But my acquaintance with these countries did not permit me to regard that number as other than a foundation for an enlarged and improved edition, and this second edition will contain about 100,000 names, under which much connected with India and with Eastern and Southern Asia will be found.

I have spared neither time nor labour to make the present edition as perfect as possible, but a Cyclopedia must necessarily ever be progressive.

1871

Edward Balfour

PREFACE TO THE THIRD EDITION

THE first edition of this Cyclopædia was published in 1858 in India, the second, also in India, in 1873, and the years 1877 to 1884 inclusive have been occupied in revising it for publication in England. During this process, every likely source of further information has been examined, and many references made. I am under obligations to many learned men, to the Secretariat Officers of the Indian Governments, and to the Record and Library Officers of the India Office, Colonial Office, and British Museum, for their ready response to my applications for aid.

This edition contains 35,000 articles, and 16,000 index headings, relating to an area of 30,360,571 square kilometers (11,722,708 square miles), peopled by 704,401,171 souls. In dealing with subjects in quantities of such magnitude, oversights and points needing correction cannot but have occurred; but it is believed that errata are not many, and will be of a kind that can be readily remedied.

It is inevitable that difficulties in transliteration should be experienced, owing to the variously accented forms which some words assume even among tribes of the same race, also to the different values accepted in many languages for the same letters, and especially to the want of correspondence in the letters of the several Eastern alphabets; but in this work traditional and historical spelling has not been deviated from, and the copious Indices will guide to words of less settled orthography.

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Men of the same race, habits, and customs, plants and animals of the same natural families, genera, and even species, are so widely distributed throughout the South and East of Asia, that local histories of them are fragmentary and incomplete. India in its ethnology, its flora and fauna, can therefore only be fairly dealt with by embracing a wider area. This is the reason why the Cyclopædia and my work on the Timber Trees include all Eastern and Southern Asia, the regions, the areas and populations of which may be thus indicated :—

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INDIA, EASTERN AND SOUTHERN ASIA.	SQUARE KILOMETERS.	POPULATION.
Caucasus, Russian,	472,666	5,546,554
Trans-Caspian, do.	327,068	203,000
Central Asia, do.	3,017,700	5,086,000
Independent Turkoman Region,	206,500	450,000
Khiva,	57,800	700,000
Bokhara, Thignan, Karategin, etc.,	239,000	2,130,000
Arabia,	3,156,600	5,000,000
Persia,	1,647,070	7,653,000
Afghanistan and Provinces,	721,664	4,000,000
Kafiristan,	51,687	500,000
China Proper,	4,024,690	350,000,000
China Provinces,	7,531,074	21,180,000
	11,555,764	371,200,000
Cerea,	236,784	8,500,000?
JAPAN AND PROVINCES,	382,447	36,357,212
British India and Feudatories,	3,774,193	252,541,210
Nepal, Bhutan,	234,000	3,300,000
French India,	508	276,649
Portuguese India,	3,355	444,987
Ceylon,	24,702	2,606,930
FURTHER INDIA—		
British Burma,	229,351	3,707,646
Manipur,	19,675	126,000
Tribes south of Assam,	65,500	200,000
Burma, Independent,	457,000	4,000,000
Siam,	726,850	5,750,000
Annam,	140,500	21,000,000
French Cochín-China,	59,456	1,597,013
Cambodia,	83,861	890,000
Malacca, Independent,	81,500	300,000
Straits Settlements,	3,742	390,000
ISLANDS—		
Andamans,	6,497	14,500
Nicobars,	1,772	5,500
Sunda Islands, Moluccas,	1,693,757	28,867,000
Philippines, Spanish Indies,	296,182	6,300,000
Netherland India,	677,038	27,154,054
New Guinea and Papuan Islands,	785,862	807,956
British Northern Borneo,	57,000	150,000
Australia, . . . . .	...	2,193,200
Tasmania, . . . . .	...	115,705
New Zealand, . . . . .	...	489,933
Total, excluding Australia, Tasmania, and New Zealand,	30,860,571 sq. kil. 11,722,708 sq. m.	704,401,171

I am under obligations to Messrs. Morrison & Gibb for their careful press-work. All that their art could do has been done to aid me in keeping the work in a compact form.

EDWARD BALFOUR.

ENCYCLOPAEDIA ASIATICA

VOL. IV.

H—JANGTANG

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H

H. This letter in the English language, as an aspirate, shows that the vowel following it must be pronounced with a strong guttural emission of voice, as in *hammer*, *house*, *humidity*, *hehn*, *history*, *hyson*; but in a few English words it is quiescent, as in *hour*, *honour*. There is no letter *h* in the Tamil alphabet, and in foreign words introduced into it, the *h* is changed to *g*, *q*, or *r*; but this English letter is represented in the Arabic, Persian, Urdu, Sanskrit, Hindi, Mahrati, Bengali, Uriya, Telugu, Karnatica, and Malealam, though the sounds are mere modifications of the simple breathing. Two of the sounds derived from the Arabic are not very nicely distinguished in Indian pronunciation. One may be something harsher than the other, and so far it agrees with the strong Sanskrit aspirate, whilst the softer breathing of the Nagari alphabet, the Visarga, or sign of the nominative case, may be regarded as peculiar. Sir William Jones distinguishes the harsher forms by an accent, as *Ah'med*. Gilchrist and Shakespear distinguish it by a dot underneath it; Professor Wilson places the dot beneath the softer Arabic aspirate. In a suggested missionary alphabet, it has been proposed to indicate the unmodified flatus by an apostrophe, as *ve'ement* for *vehement*. With the people on the line of the Indus river, the letters *s*, *h*, and *z* are permutable. Hind becomes Sind; Zalim Sing becomes Halim Hing. The difficulties, however, as to the letter *h* are not greater than in the Italian, where the initial *h* is quiescent before a vowel, and modifies the sounds of consonants. Colonel Tod says *s* and *h* are permutable letters in the Bhakka; and he supposes that Sam or Sham, the god of the Yamuna, may be the Ham or Hammon of Egypt. He also thinks it not unlikely that the Chaora, the tribe of the first dynasty of Anhalwara, is a mere corruption of Saura, as the *ch* and *s* are perpetually interchanging. The Mahrattas cannot pronounce the *ch*; with them Cheeto is Seeto.

HAASIA WIGHTII. *Nees.* This good-sized tree is not uncommon in the moist woods on the Tinnevely and Travancore range of ghats, at 2000 to 3000 feet elevation, and Animallays 4000 feet.

H. oppositifolia, *Thw.*, occurs in Ceylon.—*Beddome*.

HAB, a river on the western frontier of Sind, and for some distance the boundary between British territory and Baluchistan. It rises in Kalat, falls into the Arabian Sea in lat. 24° 52' N., long. 66° 42' E., after a total length of about 100 miles. Except the Indus, it is the only permanent river in Sind. It abounds in fish. It has been proposed to supply Karachi (Kurachee) with drinking water from the Hab.—*Imp. Gaz.*

HABAKKUK. This sacred writer says (i. 16), 'They sacrifice unto their net, and burn incense unto their drag; because by them their portion is fat, and their meat plenteous;' from which it would seem that the Jewish idolaters had a custom like that of the Hindu, who annually worship the implements of their trades.

HABARUM, a mount close to the Dead Sea, on which Moses died, in the fortieth year of the exodus. In this interval the whole land of the Emorites had been taken, the Midianites overthrown, and the country of the king of Basan conquered, the river Jabbok crossed, and the western country on the Jordan (Batanæa and Aulonites) taken eastward and northward as far as Hermon.—*Bunsen*, iii. 252.

HABIB-us-SIYAR. A book written by Khond-amir. See Khond-amir.

• **HABIL.** ARAB. Abel, who is supposed to have been buried at Damascus. See Abu Kubaya.

HABSHI. HIND. An African or Abyssinian, Habsh being the Arabic reading of Abyssinia. Pl. Habush.

HABZ-I-DAM. PERS. A retention of the breath, or power to discontinue breathing, by which devout Mahomedans are supposed to prolong their lives. It is supposed to be a gift to devout men, and the notion is founded on the erroneous belief that human beings have to take a certain number of respirations, and if the power to suspend breathing be acted on, to that extent life will be prolonged.

HACKERY. HIND. A cart drawn by bullocks, from Akra, a cart. It may, however, be from the Portuguese Carro or Acarretai, to carry.—*W.*

HACKLES, upright pointed wires, through which the stems of flax are drawn to disentangle

or comb them out, being freed at the same time from remaining extraneous matter. The wire pins are arranged on different frames, in progressive degrees of fineness. The process is now performed by special machinery.

HADA. HIND. A blight, drying up of leaves.

HADAYK-ul-BALAGHAT. ARAB. Literally, the Gardens of Eloquence, an Arabic treatise on eloquence by Mir Shams-ud-Din of Dehli, who lived at the end of the 18th century.

HADI, a helot race, spread over all Bengal, who take their name from the original Santali word for man, Had, and who have supplied such terms as Haddi, base, low-born; Hadduk, a sweeper; Hunda, hog, blockhead, imp; Hudduka, a drunken sot, etc. Also, Hadi, in low Bengali Hadikath, is the name of a rude fetter or stock, by which landholders used to confine their serfs until they agreed to their terms. It means literally the helot's log. It was also used for fastening the head of the victim in the bloody oblations which the Aryan religion adopted from the aboriginal races, especially in the human sacrifices to Kali, to which the low castes even now resort in times of special need. In an account of such a human offering to Kali, during the famine of 1866, it was mentioned that the bleeding head was found fixed on the 'harcat,' i.e. helot's log.—*Dr. W. W. Hunter*, p. 30.

HADIAH. ARAB. A maiden of good family and courage, who precedes in battle the Bedouin Arab, mounted on a camel, in the fore ranks. She has to shame the timid and excite the brave by taunts or praise.—*Pilgrimage*.

HADIS. ARAB. (Pl. Ahadis.) The traditions of the sayings and practice of Mahomed. They are 5266 in number, and are considered a supplement to the Koran. They are also called Sunna or customs, also Ahadis Nabaweya, the Apostolic Acts. The Sunni, the Shiah, and the Wahabi sects all acknowledge traditions as binding on them; but the Shiah sect do not acknowledge the same collection as binding on them which the Sunni adopt, and the Wahabi recognise six Sunni books as correct.

HADIWICKE, a moderately hard, fine, close-grained, rather heavy Ceylon wood.

HADRAMAUT, a province of Arabia Felix, on the sea-coast between Yemen and Oman. The chief products are frankincense, gum-arabic, dragon's blood, myrrh, and aloes.

HADROSPHERUM, Mesospherum, and Microspherum are terms applied by Pliny to varieties of nard; perhaps a mistake of his, as Dioscorides observes that some people made the mistake of regarding malabathrum as the leaf of Indian nard.—*Yule, Cathay*, i. p. cxlv.

HÆMADIPSA CEYLANICA. Blain. The land-leech of Ceylon. Another is the Hæmadipsa Boeckii, and another is Hæmopsis paludum.

HÆMATIN, a colouring substance obtained from the Cæsalpinia sappan tree.

HÆMATITE. Tai-che-shih, CHIN.
Yu-yu-liang, . . . CHIN. Red hematite, . . . ENG.
Brown hematite, . . . ENG. Hydrated oxide of iron, . . .

A name given to certain forms of native peroxide of iron. When of a red colour it is called red hematite; and when brown, brown hematite. According to Hanbury, it resembles the old lapis stiles. It occurs in British India and China in many places; and the Chinese

regard it as crumbs from the table of the great emperor Yu, and use it medicinally in powder and in tincture.—*Smith*.

HÆMATORNIS CAFER is one of the bulbuls of Southern India. It is not a song bird, and is called the bulbul-i-gul-dum, or bulbul with the rose tail. Like quails and cocks, it is trained to fight, and when pitted against an antagonist it will sink from exhaustion rather than release its hold.

HÆMATOXYLON CAMPECHIANUM, the logwood tree; has been introduced into India, where it grows readily and seeds abundantly. It is used only as a dye, and the bark is astringent. It is a low spreading tree, seldom thicker than a man's thigh.—*Cleghorn in Madras J. J. R.*

HÆNKE. The Reliquiæ Hænkianæ of Presl is a folio volume, with plates, devoted to the materials collected by Hænke, who was employed in the Spanish service, and collected in America and Manilla. The Indian plants described are few, and the descriptions and identifications far from satisfactory.—*Hooker f. et Thomson*.

HÆ-NUN, called by Europeans Amoy, an island on the S.E. of China about 22 miles in circumference. The town of Amoy is situated on the S.W. part of the island, opposite the small island of Ko-lan-soo, which affords protection to the town anchorage or inner harbour. On the western side of the island is that of Woo-seu-shan, also that of Woo-an. Amoy was delivered over to the British, after the first Chinese war of 1841-2, and forms one of the consulates thereof, Shang-hai and Hong-Kong being others.

HÆ-TAN, a large and irregularly-shaped island on the E. coast of China, near the mainland, between lat. 25° 24' and 25° 40' N. Its northern part, Hæ-tan peak, is in lat. 25° 36' N., and rises to an elevation of 1420 feet; but its eastern and western shores are low, and indented with deep sandy bays.—*Horsburgh*.

HÆTUMAT, a land mentioned in the Vendidad of the Zoroastrians, as the eleventh of which the Aryans took possession. It is the valley of the Helmand to the west of Arachosia.—*Bunsen*.

HAFIZ, ARAB., from the Arabic Hifz, he did remember, is a literary title given to a Mahomedan who can recite the whole of the Koran from memory. It is generally earned by lads, sometimes of very tender years, and in large towns there are always several of the Hafiz. Where so many are actual Hafiz, multitudes have almost attained thereto, and remember vast portions of their religious book; and every Mahomedan with any education can indicate almost any passage under discussion. The Koran is not, perhaps, a third the size of the Old and New Testaments, and the feat of committing it to memory is comparatively easy, which may explain why we so seldom hear of a Bible Hafiz. Recently, however, in 1860, a religious gentleman in Massachusetts having offered several prizes of Bibles to those, old or young, who should commit to memory and repeat the largest portion of the Bible, Mrs. Betsy Conant, who had been residing in Melrose, a lady sixty-eight years of age, committed to memory the entire Bible, Old and New Testament, reciting each day in the week. This was certified by her daughter, and also by the superintendent of the Sabbath school. An Irish servant girl repeated nearly 10,000 verses; three other women repeated

above that number; and a list was appended of some 20 more who were able to repeat from 3000 to 9000 verses. It is noticeable that more than two-thirds of the successful competitors were women, showing how strong the faculty of memory is among the sex as a general rule.

HAFAZ, a lyric poet, native of Shiraz, author of the *Drwan-i-Hafiz*. Many of his poems have been translated; one by Sir William Jones, and which perhaps surpasses the original, commences with

'Sweet maid, if thou wouldst charm my sight,
And bid these arms thy neck unfold;
That rosy cheek, that lily hand,
Would give thy lover more delight
Than all Bokhara's vaunted gold—
Than all the gems of Samarkand.'

Hafiz is his *takhallus*, or poetical appellation. His own name was Muhammad Shams-ud-Din. Very little is known of his life; and it appears to have been in no degree remarkable for incident. He was born at Shiraz in the beginning of the 14th century, and died and was buried near there in A.D. 1338. He is now regarded as a holy man, and oblations are offered at his shrine. He is buried in a small garden about half a mile outside the walls of the town. The tomb over his remains was erected by Karim Khan. It is a block of white marble in the form of a coffin, on which are cut, in the most exquisite Persian characters, two of his poems, and the date of his death. A copy of his works is kept in an adjoining house. The white material with which the tomb is formed, has become, from exposure to the weather, very much discoloured, and adds to the sombre effect produced by the cypress trees that surround it. Four well-known distichs of Hafiz inculcate the return of good for evil:

'Learn from yon orient shell to love thy foe,
And store with pearls the hand that brings thee woe:
Free, like yon rock, from base vindictive pride,
Emblaze with gems the wrist that rends thy side:
Mark where yon tree rewards the stony shower
With fruit nectareous, or the balmy flower:
All Nature calls aloud—Shall man do less
Than heal the smiter, and the railer bless?'

—*Pottinger's Tr.* pp. 241–2; *Onseley*, pp. 241–2; *Sir William Jones*; *As. Res.* iv.; *MacGregor*, iv. p. 557.

HAFT. PERS. Seven:—

Haft-Aklīm, the seven climates, into which Mahomedan geographers divide the earth. The term is meant to include the whole world, and kings have sometimes assumed the title of King of the Seven Climates. It applies, however, to the northern hemisphere, which they partition into zones of various breadth, from east to west. Haft-Kishwar has the same meaning and allusion as Haft-Aklīm; and the sovereignty of the world is sometimes assumed under that title.

Haft-Dhat, literally seven metals, corresponding to the planets, each of which ruled a metal: hence Mohar, the sun, for gold; Chandra, the moon, for silver.

Haft-Hind, the seven rivers of the Panjab.

Haft-Khaneh, or Satgurh group of caves, is one of the Behar caves in the neighbourhood of Rajagriha, the most ancient caves in India, about 200 B.C. The others are the Milkmaid's cave, the Brahman Girl's cave, the Nagarjun cave, and in the neighbourhood are the Karna chapara and Lomas Rishi caves.

Haft-Rang, a beautiful variety of the rose.

Haft-Lang, a tribe of the Bakhtiari.

Haft-Tan, literally seven persons who, in the early days of Mahomedanism, were worshipped in Kurdistan by the Ali Ilahi sect as the incarnate deity. Baba Yadgar was one of the seven persons. His tomb is in the pass of Zardah, and is the holy place of the Ali Ilahi sectarians, who believe in upwards of a thousand incarnations of the godhead. At the time of the Arab invasion of Persia, the Zardah pass was regarded as the abode of Elias.

HAFT-AKLIM. Amin Ahmad, Razi, author of a history of the Persian poets, entitled *Haft-Aklīm*, or the Seven Climates, has illustrated his work with much geographical matter. Ahmad was surnamed Razi, being a native of Rai. Amin Ahmad said the cuneiform character was then unintelligible to the learned of all religions.—*Onseley's Tr.* ii. 402, iii. 10.

HAGENIA ABYSSINIA, the kosso or kousoo, a moderate-sized tree of Abyssinia. Its flowers are largely used in tapeworm. It is a drastic purgative, and is largely used by the races who eat raw flesh.

HAGGIS. Sultan Baber compares the jack-fruit to a haggis. 'You would say,' quoth he (p. 325), 'that the tree was hung all round with haggises.'—*Yule, Cathay*, ii. p. 362.

HAIGA, a clan of Brahmans in Canara.

HAIHAYA, son of Yadu, and grandson of Nahusha. The Haihaya are mentioned as a powerful nation, who defeated and killed Jamadagni, and are supposed to be the same with the Persians. In Colonel Tod's time, a tribe of this race were occupying the top of the valley of Sohagpur in Bagheleund. They were aware of their ancient lineage, and though few in number, they were still celebrated for their valour.

HAIL. In Exodus ix. 24, it is mentioned that there was hail, and fire mingled with the hail, very grievous, such as there was none like it in all the land of Egypt since it became a nation. Hail-storms of India occur in very limited patches, and seldom last above 15 or 20 minutes; but falls of hail occur simultaneously in places many miles apart. The hail occasionally consists of masses of ice, destroying houses, men, cattle, goats, and sheep. At the end of the 18th century, a mass fell at Seringapatam the size of an elephant, which took three days to melt.

On the 10th April 1822, at Bangalore, 27 bullocks were killed.

In May 1823, a violent hail-storm, with stones of considerable size, occurred at Hyderabad in the Dekhan. Sufficient quantities were collected to cool the wine for several days.

At Dharwar, in May or June 1825, a hail-storm occurred, with hail in size from that of a filbert to a pigeon's egg.

In 1826, a mass, nearly a cubic yard in size, fell in Kandesh.

At Kotah, on the 5th March 1827, 6 persons were killed, 7 others severely injured, and animals and birds killed and hurt.

In April 1838, a mass of hailstones, 25 feet in its larger diameter, fell at Dharwar.

On the 22d May, after a violent hail-storm 80 miles south of Bangalore, an immense block of ice, consisting of hailstones cemented together, was found in a dry well.

On the 12th May 1853, in the Himalaya, north of Peshawur, 84 human beings and 3000 oxen were killed by masses of ice, nearly a foot in circumference, hard, compact, and spherical.

On the 11th May 1855, ice-pieces fell at Naini Tal of the dimensions of cricket balls, and birds were killed.

A hail-storm occurred at Futtehgur on the 18th April 1878, when much injury to buildings resulted.

In Ceylon hail has fallen at Kornegalle, at Badulla, Kaduganawa, and Jaffna. On the 24th September 1857, during a thunder-storm, hail fell near Matelle in such quantity that in places it formed drifts upwards of a foot in depth.

One year a heavy fall of hailstones took place near Ashteh (the village where Bapoo Gokla fell), which caused severe injuries to people working in the fields, and the death of a girl about ten years of age. Many of the hailstones were larger than a good-sized wood-apple; they fell in an oblique direction, and so accumulated at the foot of walls that it took two days in some places for them to melt away. One piece was larger than a man's head, and took two days to dissolve; the wheat crops, which were then nearly ripe for taking down, were quite destroyed by it. A hail-storm of exceptional severity passed over Tiperah in Eastern Bengal on the evening of the 12th March 1879; 17 persons were killed and 10 wounded. Native reports stated that 29 were killed and 141 injured. Houses were blown down and unroofed, the storm being accompanied by a strong wind.

Hail-storms of India occur in each month of the year, but chiefly in the dry months. Of 127 such hail-storms, 102 occurred in the four months February to May inclusive:—

January, . . . 5	May, . . . 17	September, . . . 2
February, . . . 20	June, . . . 4	October, . . . 3
March, . . . 31	July, . . . 2	November, . . . 4
April, . . . 34	August, . . . 0	December, . . . 5

In the first fortnight of March in one year, on the 3d, a violent hail-storm occurred at Bolarum, which dashed right through the roofs of the houses, and stripped the trees of their leaves and branches; it was experienced at Secunderabad, but did not extend to Hyderabad itself. A hail-storm occurred at Cawnpur on the 8th, and two violent hail-storms happened at the same time near Meerut, many of the fragments being the size of ostrich eggs. A violent squall, with hail, occurred at Hurrghur on the 12th; 270 birds, which had been killed by it, were picked up in a single garden, and the river was found covered with dead fish, which seemed to have been attracted to the surface, and fell victims to the gratification of their curiosity. In Berar and in the parts of the Mahratta country there is a caste of hail-conjurors, the Garpagari, who pretend to have the power of preventing hail falling on fields.—*Dr. Buist's Physical Research; Dr. Turnbull Christie, Jan. Ed. Jo. ii. of 1830.*

HAILEYBURY COLLEGE, an institution near London, of the English E. I. Company, at which its civil servants were trained to be writers in India, for magisterial, revenue, and judicial offices. It was abolished on the assumption of India by the Queen of Great Britain.

HAINAN, an island bounding the Gulf of Tonquin to the eastward, extends 165 miles in a N.E. and S.W. direction, and is about 75 miles in breadth, between lat. 28° and 31° N., and long. 110° E. Viewed from the sea, it presents many high and uneven appearances, but inland there are many level districts, cultivated with rice, sugar-

cane, tobacco, and betel-nut trees. These level tracts are separated by lofty mountains and impenetrable forests, through which paths are opened. The island is subject to the Chinese. The fishing boats are built of a hard, heavy wood, and sail fast. Their fishing voyages, commencing in March, last for two months, and they navigate to 700 or 800 miles from home, collecting beche de mer, dry turtle, and sharks' fins amongst the numerous shoals and sandbanks in the S.E. of the China Sea.—*Horsburgh.* See Tonking.

HAINES, SIR FREDERICK, G.C.S.I., served in the Sutlej campaign of 1845-46, including the battles of Moodkee and Ferozeshah, at the latter of which he was severely wounded; also in the Panjab campaign of 1848-49, and more recently in the Crimea, including the battles of the Alma, Balaklava, Inkermann, and siege of Sebastopol. He was, in 1871, appointed to the command of the Madras army, and in 1876 succeeded Lord Napier of Magdala as Commander-in-Chief in India. He was created a G.C.B. in 1877.

HAIQ. The populations to whom the term Armenian is now applied, call themselves Haiq. Their chief occupancies are the Turkish province of Erzerum, and the Russian district of Erivan, and the patriarch resides in Erivan. They are now under the sway of Russia, Persia, and Turkey, but they are found in all Eastern countries. 37,676 are in European Russia alone; and one important settlement of them is in Venice, that of the Mechitarist monks, on the island of St. Lazarus. In figure the Armenians have been likened to the Jew, the Turk, and the Afghan. They evince great commercial aptitude, and are bankers and merchants. In Armenia, however, they cultivate the soil. Before their conversion they were fire-worshippers. Many of them now are Nestorian Christians, some are Romanists. The language of the present day has affinities with the Iron, and Persian, Syrian, Arabic, and Turki. General tradition and the formation of language point alike to the mountains of Armenia as the birthplace of the Arab and Canaanitish races, and there is especial native evidence to the same effect as regards Edom, consequently the Phœnicians.

HAIR.

Haar, . . . DA., DU., GER.	Voloss, RUS.
Cheveux, Poil, FR.	Kesa, SANSK.
Bal, GUJ., HIND.	Cabellos, SP.
Pelo, IT., SP.	Har, SW.
Capilli, Pelles, LAT.	Mairu, TAM.
Ruma, Rula, MALAY.	Ventrakulu, TEL.
Ranbut, Tailhan,	Sach, TURK.
Cabello, PORT.	

With the exception of man, the exposed parts of the bodies of mammals are covered with hair. Hair is a considerable article of traffic. Goats' hair is largely exported from Bombay to England. The hair of the elephant's tail and the bristles of the wild boar are utilized in India. The value of the exports of hair from India amounts to about £2000 annually, about 200 to 300 tons.

A remarkable command is given to the Israelites in Leviticus xix. 27: 'Ye shall not round the corners of your head,' or, literally, 'Ye shall not go round,' i.e. with a razor, 'the sides of thy head.' The Septuagint renders this, 'Do not make Sisoen of the hair of your head.' Greek lexicographers say that Sisoen, though not a Greek word, means a lock, or circular portion of hair left unshaven,

and consecrated to Saturn, the grandfather of Bacchus, who is thought to correspond with Siva. In some respects Saturn also resembles Siva. A recent commentator says on the above text, 'It seems probable that this fashion had been learned by the Israelites in Egypt, for the ancient Egyptians had their dark locks cropped short, or shaved with great nicety, so that what remained on the crown appeared in the form of a circle surrounding the head. Frequently a lock or tuft of hair was left on the hinder part of the head, the rest being cut round in the form of a ring, as the Turks, Chinese, and Hindus do at the present day.'

Poole says 'the Gentiles cut their hair for the worship of devils or idols, to whom young men used to consecrate their hair, as Homer, Plutarch, and many others write.' Professor Vitringa looks upon this manner of trimming the hair in a circular form, while the rest of the head is shaven, as a symbol of the sun equally diffusing his rays, which the ancients called his hair. The Romans are said to have worn the hair of the head uncut, either loose or bound behind in a knot, and consecrated it to Apollos.

Herodotus says that the Arabians cut their hair in such a manner, that the circumference of their head is found to be round all about as if they had been cut with a bowl, in imitation of Bacchus, and in honour of him. He says also that the Macians, a people of Sybia, cut their hair round so as to leave a tuft on the top of the head. We learn from Homer that it was customary for parents to dedicate to some god the hair of their children, which they cut off when they came to manhood. Achilles, at the funeral of Patroclus, cut off his golden locks, which his father had dedicated to the river-god Sperchias. From Virgil it appears that the topmost lock of hair was dedicated to the infernal gods. In Athens it is said Hercules and Apollos were the chief deities selected for dedicating the hair,—to the first by the humbler part of the community, and the latter by the more wealthy. Tertullian speaks of an extraordinary rite about the dedication of the hair of infants, which was practised even before they well had any hair, and that cut off when they were named.

The ancient Greeks, in laying out their dead, placed an obolus, a Greek coin, in the mouth to pay Charon's fare across the rivers Styx and Acheron, and a cake made of flour and honey to appease Cerberus. Greek men cut off their hair when they obtained the age of puberty, and dedicated it to some deity. Theseus is said to have repaired to Delphi to perform this ceremony, and to have consecrated his shorn locks to Apollo. After this it was again allowed to grow long, and only cut off as a sign of mourning. Thus, at the funeral of Patroclus (Iliad, xxiii.) the friends of Achilles cut off their hair, and

'On the corse their scattered locks they throw.'

In some parts of Greece, however, it was customary to wear the hair short, and to allow it (Cassandr. 973) to grow long when in mourning.

'Neglected hair shall now luxurious grow,
And by its length their bitter passion show.'

Hindu men, on the death of a relative, abstain from shaving, and the Burmese dead have a coin placed with them for the spirit-world.

The women of nearly all the oriental races

wear long hair, differently braided. The men of Baluchistan and Afghanistan shave the front, but wear hair long on the back and sides of the head. Mahomedans of India as a rule shave their heads. Hindu men also shave, leaving only a scalp-lock on the crown. This scalp-lock is noticed by Martial, Seneca, and Tacitus as worn by German races. Brahman women, on the demise of their husbands, have their heads shaved.

In Luristan, the women, on the death of their men relatives, cut off their hair, and hang the locks around the tomb. The hair of Hindu women, and often also that of men, is frequently made a votive offering to their gods. Crowds of the Hindu pilgrims to Tripetty and other holy places, both men and women, return with heads shaved. Hindu lads have their heads shaved. Nero placed his first beard in a jewelled box, and dedicated it to Jupiter. Herodotus mentions (Melp. iv. c. 34) that the Delian maidens used to cut off a lock of their hair before marriage, in memory of the Hyperborean virgins who died in Delos. In some tribes of the Orang Benua of the Malay Peninsula, and among the Malay, it is customary to cut off a part of the bride's hair.

The Somali of the east of Africa change their hair into red by mixing it with lime. Amongst the Romans, blonde auburn tresses were most admired, and to obtain these, men steeped their hair in a powerful alkali, as the Somali now do. Mahomedans of India have black hair, occasionally dye it red with henna or mehndi. The tuft of hair, or scalp-lock, Shik'ha, SANSK., D'zutu, TEL., Kudi mai, TAM., is worn by all who profess Hinduism, and it has been a subject of much discussion with Christian missionaries, whether, on conversion, the new Christian's scalp-lock should be removed.—*De Bode*, ii. 218-19; *Newbold*; *Postans*; *Lubbock*.

HAIR POWDER.

Poudre à poudrer, . FR. | Polvere di cipri, . . . It.
Puder, GER. | Polvos de peluca, . . . Sr.

Hair powder is generally made from pulverized starch, and perfumed with various scents.—*Faulkner*.

HAI-TSAI. CHIN. Literally, sea vegetable. Hai-tsai, Hai-wan, and Kwan-pu are Chinese names for several species of Laminaria, Rhodoménia, Iridæ, etc., used in China for food, for size, and for jelly. Kwan-pu is the tangle.

HAI-YANG is the Neptune of the Chinese. In Hi-ching-mian is a temple of the sea-god. At Ta-coo, in one hand he holds a magnet as emblematic of security, and a dolphin in the other, to show his sovereignty over the inhabitants of the sea; his head, beard, and hair are evidently intended as a personification of water.—*Macartney's Embassy*, i. 31.

HAIYU, Haioo, Haya, or Vaya. The Haiyu, the Chepang, and the Kusundu are three uncivilised Bhot tribes, who dwell amid the dense forests of the central region of Nepal, to the westward of the great valley, in scanty numbers, and nearly in a state of nature. They live in huts made of the branches of trees, on wild fruits, and the produce of the chase. The Chepang are slight, but not actually deformed, though 'with large bellies. Mr. Hodgson says they are of Mongol descent. Their language is akin to that of the Lhopa. The Chepang, Haiyu, and Kusundu seem to belong to the Rawat group

of frontier populations. They are named by Mr. Hodgson as Durre, Denwar, and Bramho. They occupy the districts where the soil is moist, the air hot, and the effluvia miasmatic. They dwell in Nepal as the fragments of a tribe of great antiquity, with peculiar traditions, language, and appearance, all tending to isolate them from the people amongst whom they dwell.

HAIZA. ARAB., HIND. Cholera. Haiza-kappa, *Kalanchoe varians*.

HAJ. ARAB. A pilgrimage by a Mahomedan to Mecca, Medina, Jerusalem, Sinai, etc.; hence the title Haji, a pilgrim. Hajjat, a woman pilgrim. The pilgrimage of Mahomedans to Mecca—enjoined by the Koran (Sura, xxii. 28)—is incumbent on all men and women who have sufficient means to meet the expenses of the journey, and to maintain their families at home during their absence. Its ceremonial continues during three days of the month Zi-ul-haj. The day of the ceremony is the 10th Zi-ul-haj, on the Eed-ul-Kurban or Bakrid festival. The setting forth of the pilgrims from the distant parts of the world is generally attended with great show. The Persian Shiah sect resort in pilgrimage to three places. The town of Meshid is reckoned the least in the scale of sanctity; and those who have been there to the tomb of Imam-Raza, obtain the title of Meshidi. The next after them are the Karbalai, who stand a degree higher in estimation; while those only who have visited the Kaba at Mecca and the tomb of Mahomed at Medina, can lay claim to the title of Haji. A Persian will feel offended if you call him Meshidi, when he has a right to the superior degree of Karbalai, or the still higher and more pompous appellation of Haji. Thus Meshidi, Karbalai, and Haji become titles of distinction. Haj-ul-Asghar, the lesser pilgrimage. Haj-ul-Akbar, the greater pilgrimage. About 70,000 annually visit Mecca.

The Indian Haj is the most numerous of all the pilgrimages which arrive every year at Jeddah. In 1880 it consisted of 15,000 souls, the next most numerous being the Malay Haj, which numbered 12,000. The latter consists mostly of Dutch subjects. The Dutch encourage their subjects to visit the holy places in Arabia, on the principle that the experience which is gained on the journey of the tyranny and extortion of the Musalman government in Hejaz tends to increase in a Haji the sense of the advantages he enjoys at home.

Haj Darwazah, or Mecca Darwazah, the pilgrim gate of the city, from which the pilgrims issue when proceeding on pilgrimage.

HAJAM, HIND., the Nai of the Hindus, a barber, who shaves, bleeds, cups, cleans the ears, pares the nails, etc., usually included among the members of the village establishment.

HAJAR. ARAB. A stone, any stone:—

Hajar-ul-Akab, eagle-stones of the ancients. One of them was probably the bonduc nut of the *Guilandina bonduc*. The Greeks believed that the eagle-stones or stiles were only found in the nests of eagles; and the Arabs describe them as resembling tamarind stones, but hollow, and found in eagles' nests, and they believed that the eagles bring them from India.—*King*.

Hajar-ul-Musa, asphalt.

Hajar-us-Sinh, also Hajr-ul-Aswad, a celebrated black stone which is built into the Kaba at Mecca, an object of the greatest veneration.

This stone is set in silver, and fixed in the south-east corner of the temple. It is deemed by Mahomedans one of the precious stones of paradise that fell to the earth with Adam, and, being preserved at the deluge, the angel Gabriel brought it to Abraham when he was building the Kaba. It was, they say, at first white, but its surface has become black from coming in contact with those who are impure and sinful. It is semi-circular, about six inches in height, and eight inches in breadth. It is in the wall of the Kaba in the east outer corner, about four feet from the ground, its surface undulating and polished. Burton, on reaching the stone, despite popular indignation, testified by impatient shouts, monopolized the use of it for at least ten minutes. Whilst kissing it, and rubbing hands and forehead upon it, he narrowly observed it, and came away persuaded that it is a big aerolite. Ali Bey calls it, 'mineralogically,' a black volcanic basalt, whose circumference is sprinkled with little crystals, pointed and strawlike, with rhombs of tile-red feldspath upon a dark background, like velvet or charcoal, except one of its protuberances, which is reddish. Burckhardt (p. 137) thought it was 'a lava containing several small extraneous particles of a whitish and of a yellowish substance.'

Hajar-ul-Yahudi is encrinite, sold in Peshawur at Rs. 10 the maund.—*Burton's Mecca*, iii. p. 210; *Malcolm's Persia*, ii. p. 336.

HAJONG, a section of the Bodo tribe who dwell in the plains of Cachar.

HAJRAH or Hajirah. ARAB. Hagar, the kept woman of Abraham, the mother of Ismael, generally called the Bibi Hajirah.

HAKARI, a tribe of N. Kurdistan inhabiting the mountains on either bank of the great Zab river above Amadia. They have 14 subdivisions, also 94 Christian villages, with 15,520 souls. Their country is precipitous and difficult, the people wilder than any Kurds. They have 25,000 fighting men.—*MacGregor*.

HAKIM. ARAB. A doctor of philosophy, a doctor of medicine, a learned man, pronounced Hakeem. The Hakim or Tabib of British India is of the Mahomedan faith, and, like the Vydian Baid or Vaid, is usually a physician purist. The Hakim as a rule claims to be a follower of the Yunani or Grecian school of medicine. He designates the Hindu Vydian as of the Misri or Egyptian school, but recognises also a Suryani or Syrian school. General Ferrier says that the influence which the Hakim Sahib has generally exercised in the British embassy at Teheran, and the employment of such men as Jukes, Campbell, McNeill, Riach, Bell, Lord, and others, in various important duties in those countries, led the chiefs of Harat to suppose that physicians occupy a higher place in the councils of the British than is accorded to them.—*Ferrier, Journal*, p. 149.

HAKLUYT, RICHARD (Archdeacon), Bishop of Westminster, in 1601 was appointed Historiographer of the East Indies, by the first Chairman of East India Directors. He held constant communication with the seamen, and lectured at Oxford to the students. He died 1616, and his successor was the Rev. Samuel Purchas.—*E. J. Murray, Surveys*, 1871.

HAKODADI was a small town of Japan. Within sight of Hakodadi, and at the distance of about 25 miles, is an active volcano. The crater forms

nearly a circle, from 1500 to 2000 yards round. The ground is in some places so hot that the hand could not touch it. This volcano throws up a hot sulphur spring at about 20 miles distant, and 5 from Hakodadi, the heat of its water being 109° in the warmest part. The natives regard it as almost a certain cure in cases of skin disease. Men, women, and children, all nude, bathe together.

HAKRA, a name of the river Caggar.

HAL. ARAB., HIND. Present, present state, condition, current, as Ibrahim Khan-i-hal, the present Ibrahim Khan; Hal-ki-waste, for the occasion; Hali-sikkah, current coin. It occurs frequently in combination, and is used in revenue accounts to represent the existing state of collections.—*Elliot, Supp. Gloss.*

HAL or Har. HIND. A plough. Hali, a ploughman. It has been suggested that as the Aryans were originally and essentially an agricultural and therefore a peasant race, they may have derived their name from their plough, and words of a similar sound relating to agriculture are found in several tongues. In Latin it is Aratrum, from Aro, I plough. In Egyptian (in Nefruari), Ar is said to mean a plough. In Tamil it is Er, in Telugu Araka, in Sanskrit, along with Nagala or Nagara, it is also called Hala or Hara; and the Aryan race may possibly have obtained their name from this implement of husbandry. The Hal is a pointed beam in a plough, which serves as the ploughshare.

Hala-Ketana, SANSK., the plough-ensign, one of the insignia of royalty of the great Chalukya dynasty, when ruling at Kalian. Hali, a ploughman.

HALA, also Halla Kandi, a ruined city on the Indus, 30 miles above Hyderabad. The Hala deputy collectorate is between lat. 25° 8' and 26° N., and between long. 68° 16' 30" and 69° 17' E.

HALA, a range of mountains, called also the Brahuc range. It is the great mountain system of Baluchistan, extending from the Suliman Hills, in lat. 30° 30' N., by the curved Bugti and Mari (Murree) chain to the north of Shawl, and thence in a generally S.S.W. direction to the ocean, which it reaches at Ras Mowari (Cape Monze), in long. 24° 46'. Its breadth and height vary. The Chahl-tan is 11,000 to 12,000 feet, 7000 feet being the highest part at Kalat. Shawl is 5900 feet. In the northern part is the Bolan pass, and the Moolla pass is near Gandava. It throws out to the W. and S.W. numerous offshoots, which traverse Makran, and either sink into the ocean or the desert plains of Eastern Persia, or into the mountain system of Persia.—*MacGregor.*

HALAILI, a cotton stuff with long stripes of white silk, a favourite material amongst the city Arabs. At Constantinople, where the best is made, the piece, which will cut into two shirts, costs about thirty shillings.

HALAL. ARAB. The new moon. It is a favourite symbol in Mahomedan standards as a crescent, indicating continuous increase.

HALAL. HIND. Lawful food for Mahomedans, as opposed to Haram, unlawful food. The lawful animals are such as chew the cud, and are not beasts of prey; birds that pick up food with their bills, and do not seize their prey with their claws, or wound them with their bills; fish, but no other

marine animals, and locusts. Reptiles and wine and all intoxicants are unlawful.

HALAL KHOR. HIND. PERS. A sweeper, a house scavenger. The words are Arabo-Persic, and mean a lawful eater, i.e. one to whom everything is lawful. Scavengers are usually Mahomedans, and are also called Mahtar, Bhangti, Toti, Lal-Begi.

HALAR, a principality in the Gulf of Cutch, of which Nowanagar is the capital, ruled over by the Jam of Nowanagar. See Rajputa.

HALAS, a branch of the Sakai population of the Malay Peninsula. They tattoo their face and breast, pierce their ears and nose, and insert porcupine quills. See Kedah.

HALAYA PAIKA, or Old Paik, a race in Mysore. Wilson says Halepaik, KARN., is a term applied in Mysore to the drawers of tari, who speak the Tuluva language.

HALAYUDHA BHATTA, author of the Abhidana Ratnamala, a Sanskrit dictionary. He lived about the 7th century.—*Dowson.*

HALBA. GOND. Immigrants into the Central Provinces from the south, and their principal colony is in the S.W., where they hold 87 flourishing villages. They gain their living chiefly by distilling spirits, and worship deified distillers, at the head of whom is Bahadur Kalal, which merely means the 'bold distiller.' They are, next to the Teli, the best cultivators; except in the jungles, they have generally become Hinduized. All that is necessary for a good Halba is that he should sacrifice once in his life three goats and a pig, one to each of the national deities, called Narayn Gosain, Burha Deo, Sati, and Ratna.

HALCYONIDÆ, the kingfisher family of birds, of the tribe Fissirostres, order Inscassoidea. It has two sub-families, the Alcedininae and Halcyoninae.

Sub-Fam. Halcyoninae.

Halcyon anauropterus, *Pearson*, the brown-winged kingfisher of Bengal, Arakan, and Tenasserim.

Halcyon fulgidus, *Gould*, is a very beautiful kingfisher of Lomhok. It lives in thickets away from water, and feeds on snails and insects picked from the ground, like the great laughing jackass of Australia.

Halcyon fuscus, *Rodd.*

H. Smyrniensis, <i>Sykes.</i>	|	Alcedo fusca, <i>Bodd.</i>
Sade-buk, BENG.	|	Vichuli, TAM.
Match-ranga, . . . . "	|	Lak-muka, TEL.
Kilkila, HIND.	|	Buche-gadu, "

The white-breasted kingfisher; inhabits all India, Ceylon, and eastwards to China.

Halcyon leucocephalus, *Gmel.*

H. gural, <i>Pearson.</i>	|	H. brunneoceph., <i>Jerd.</i>
H. Capensis, <i>Linn.</i>	|	Alcedo leucoceph., <i>Gmel.</i>
H. Javane, <i>Gray.</i>	|	
Gural, BENG.	|	Male poyma, MAL.

The brown-headed kingfisher, is over all India and the Archipelago.

Halcyon saurophaga, a very fine kingfisher, with white head, neck, and lower parts, green scapulars, and blue wings and tail, from New Guinea, is a very shy bird, frequenting the margin of the island, usually seen perched on some detached or solitary branch, as if sunning itself, and darting off into the dense bush upon being approached.—*Macquillivray, Voyage*, i. p. 245.

Halcyon atricapillus, *Gmel.*

Alcedo atricapillus, <i>Gm.</i>	|	A. pileata, <i>Bodd.</i>
A. brama, <i>Less.</i>	|	

The black-capped purple kingfisher; is rare in India, but more common in the countries eastwards to China.

Halcyon Coromandelianus, Scop.

H. Coromandel., Blyth. | H. lilacina, Sw.
H. alipya, Hodgk. | H. Schlegelii, Bonap.

The ruddy kingfisher of the Himalaya, Nepal, Sikkim, and the east coast of the Bay of Bengal.

Besides these, are *H. cyaniventris* from Java, *H. concreta* from Sumatra, *H. pulchella* from Malacca and S. Tenasserim.

Todiramphus collaris, Scopoli.

A. chlorocephala, Gm. | A. sacra, Gm.

The white-collared kingfisher of the Sunderbuns, Arakan, Tenasserim, Malaya, and Archipelago. Its feathers are largely prized by the Chinese, who buy the skins at 24 for a dollar.

There are other species in the Nicobars and Archipelago.

Ceyx tridactyla, Pallas.

A. erythica, Pall. | A. purpurea, Gmel.

The three-toed purple kingfisher, is found in Sikkim, Malaya, and the islands.

Sub-Fam. Alcedinæ.

Alcedo Bengalensis, Gm., common Indian kingfisher.

Alcedo euryzona, Temm., great Indian kingfisher.

Several species occur east of the Bay of Bengal, viz. A. Beryllina from Java, A. Moluccensis from Moluccas, A. Meninting of Java.

Ceryle rudes, Linn.

Ispidia bicincta, Sw. | I. bitorquata, Sw.
Karikata, . . . BENG. | Korayala kilila, HIND.
Phutka-match-ranga, ,,

The pied kingfisher; occurs in Africa and most parts of South Asia and south of Europe.

Ceryle guttata, Vigors.

Matchi bag, HIND. | Ung kashiya, LEP.

The large-created black and white kingfisher, is a native of the Himalaya.—Jerdon, i. pp. 221-235.

HALDA or Harda, HIND., is a mildew affecting the cerealia, in which the plant turns yellow and withers.

HALDA or Haldi. HIND. Among Mahomedans, the ceremony of smearing a couple with turmeric between the period of their betrothal and marriage.

HALDAR or Holdar, a name borne by some Bengal families of the trading castes.—Wilson.

HALDIA MOORA and Singia moora are roots brought to Ajmir mixed with haldi; they are acrid and poisonous, and are carefully separated. *Genl. Med. Top.* p. 151.

HALEBID, a village in the Hassan district, Mysore, lat. 13° 12' 20" N., long. 76° 2' E.; population (1871), 1207; the site of the ancient city of Dorasamudra or Dvaravatipura, the capital of the Hoysala Ballala dynasty. It was apparently rebuilt in the 13th century by King Viri Someswara. To him is assigned the erection there of two magnificent temples in honour of Siva, which rank among the masterpieces of Hindu art. The larger, Haisaleswara, rises 25 feet high above the terrace on which it stands. The ornamentation consists of a series of friezes one above another, each about 700 feet long, and carved with the most exquisite elaboration. One frieze alone represents a procession of not less than 2000 elephants. The Ballala kings ruled from about A.D. 950 to A.D. 1310. It was plundered by Ala-ud-Din's general Kafur, a eunuch and con-

verted Hindu leader of a Mahomedan army, and it was finally destroyed by Mahomed III., in A.D. 1326. Jonur, also called Moti-talao, twelve miles from Seringapatam, was afterwards made the capital. The entire walls of the Halebid Saiva temple are covered with carvings in stone, forming a Hindu pantheon. There are also two Jaina temples with colossal idols. The roofs are supported by splendid columns, said to be of pot-stone, beautifully turned, and so highly polished as to be used as a mirror when wetted with water.

HALFA. ARAB. The *Stipa tenacissima*, a plant of North Africa, largely utilised as a paper material.

HALHED. Nathaniel Brassy Halhed in 1776 published a code of Gentoo laws or ordinations of the Pandits, from a Persian translation made from the original, written in the Sanskrit language; author of a Grammar of Bengali, A.D. 1778.

HALI, in Kamaon, one of the Dom race who has been bought as a slave. In Surat, the Hali slave was a voluntary bondaman, who had temporarily sold himself for a sum of money.—*Wils. Gloss.*

HALIÆTUS, the sea eagle genus of birds, of the sub-family Aquilinæ, family Falconidæ, and order Raptores.

H. fulviventor, Vieill., ring-tailed sea eagle.

Falco Macei, Temm.	H. unicolor, Gray.
Haliæstus Macei, Blyth.	H. lanceolatus, Hodgk.
H. albipes, Hodgk.	
Macha rang, . . . BENG.	Bala, . . . BENG.
Mach-manga, . . . "	Kokna, . . . KOL.
Mach-korol, koral, . . . "	Ugus, . . . "

The ring-tailed sea eagle is found throughout the N. of India, along the Ganges and Indus up to Kashmir. It lives on fish, tortoises, and snakes.

H. leucogaster, Gmel., grey-backed sea eagle.

Blagrus leucogaster, Blyth.	F. dimidiatus, Rafles.
Ichthyæstus cultrungus, "	F. maritimus, Gmel.
Falco blagrus, Daud.	

This sea eagle is found throughout India, in Burma, Malaya, and Australia, chiefly on the coast and near the mouths of rivers. It lives on sea-snakes, crabs, rats, and on fish which it picks up on the beach.

H. leucocephalus is a bird of N. America and N.E. Asia.—Jerdon, *Birds*.

HALIASTUR INDUS. Bodd.

Falco Indus, Bodd.	Milvus ponticer., Jerd.
Haliæstus ponticerian., Syl.	M. rotundicaudus, Hodgk.
Sunker chil, . . . BENG.	Ru mularik, . . . HIND.
Dhobia chil, . . . "	Khemu kari, . . . SANSK.
Garuda, . . . CAN.	Ratta Ookab, . . . SIND.
Brahmany kite, . . . ENG.	Garudalawa, . . . TEL.
Pis-gender, . . . GOND.	Shemberrid, . . . YEK KALA.
Bahmani chil, . . . HIND.	Garuda mantaru, . . .

Europeans have given the name of the Brahmanykite to the *Haliastur Indus*, probably from observing the feelings of the Hindus regarding it, who revere it as Garuda, the eagle vahan of Vishnu, and believe that when two armies are about to engage, its appearance prognosticates victory to the party over whom it hovers. The Brahmanykite is very useful in the populous seaport towns of India, in removing carrion and refuse, and is never killed. Major Moor mentions as an instance of this bird's boldness, of which he was a witness, viz. its stooping and taking a chop off a girdiron standing over the fire that cooked it. The religious Hindu feeds these birds on holidays, by flinging up little portions of flesh, to which they are attracted by the call Hari! Hari! meaning Vishnu, Vishnu.

HALICACABUM.

It is found throughout all India. In Bengal, the kites and Brahmany kites breed chiefly in January and February, and disappear during the rains.

HALICACABUM of Pliny, supposed to have been *Physalis somnifera*, var. *flexuosa*.

HALICORE DUGONG. Cuv.

<i>Trichechus dugong</i> , Gmel.	H. Indicus, Owen.
<i>Halicore cetacea</i> , Ill.	<i>Dugungus Indicus</i> , Ham.
H. Indica, Desm.	
Indian dugong, . . . ENG.	Duyung, . . . MALAY.
Dugong Lamantin,	Talla-maha, . . . SINGH.
Le dugong des Indes, Fr.	

The dugong is an inhabitant of the narrow seas of the Eastern Archipelago; and Professor Owen denominated it *Halicore Indicus*, in distinction from that of the northern coast of Australia, at a time when the former had not been ascertained to frequent (as a dugong of some kind is now known to do) the Malabar coast and Gulf of Calpentyn in Ceylon. It inhabits the shallows of the Indian Ocean and about Ceylon, where the water is not more than 2 or 3 fathoms deep. It does not appear to frequent the land or the fresh water. Its flesh is delicate. The dugong was noticed as occurring in Ceylon by the early Arab sailors, by Megasthenes (Fragm. lix.) and Ælian, and subsequently by the Portuguese. It is this creature which gave rise to the tales about mermaids, which have till the present day occupied the world, and doubtless had their origin in the tales of the Arab sailors. They are phytophagous, or plant-eaters. The species named by authors are—

H. Indicus, Owen, the Malay dugong, an inhabitant of the narrow seas of the Eastern Archipelago.

H. tabernaculi, Ruppell, the dugong of the coral banks of the Red Sea, has a feeble voice, and feeds on algae. It is about ten feet long. In February and March bloody battles occur between the males. Its flesh, teeth, and skin are utilized. Their skins, called tun, are used for sandals.

H. Australis, the manate of Dampier, and white-tailed manate of Pennant, is a native of the west coast of Australia.

H. Indicus, F. Cuvier.

<i>Trichechus dugong</i> , Erxleben.	<i>Halicore tabernaculum</i> , Ruppell.
<i>Halicore cetacea</i> , Illiger.	<i>Dugungus marinus</i> , Tiedemann apud Schinz.
<i>Halicore dugong</i> , Cuvier apud Rafines.	H. Hemprichii, Ehrenb.
Dugong of Buffon.	Parampuan laut, MALAY.
Dugong, . . . MALAY.	

Under these synonyms Dr. Theodore Cantor unites all the above, which he says inhabits the Red Sea, the seas of the Malay Peninsula, Singapore, Sumatra, the Philippine Islands, Moluccas, Sunda Islands, and New Holland.—*Eng. Cyc.*; *Blyth in B. As. Soc. Journ.*; *Tennant's Ceylon*; *Cantor in B. As. Soc. Journ.*, No. clxxii. of 1846.

HALIFAX, LORD, better known as Sir Charles Wood, Secretary of State for India in the middle of the 19th century, and during the time of the revolt and mutiny. During his tenure of office, in 1854, the plan of educating the people of India was promulgated.

HALIOTIDÆ, a family of recent and fossil shells, belonging to the class Gasteropoda, of the mollusca. The genera include the *haliotis*, ear-shell, sea-ears; *deridobranclus*; *stomatia*; *scissurella*; *ianthina*, violet snail. One species, the *haliotis* or sea-ear mollusc or ear-shell, is largely

HAMAMELIDEÆ.

used as food by the people on the coast of Manchuria. They are also dried and exported to China, and sell at 300 for a dollar.—*Adams*.

Haliotis funebria, Cumming and Reeve.

H. iris, Auctorum.

Shih-kiueh-ming, . . . CHIN. Fu-yu-kiab, . . . CHIN.

This mollusc is found on the coasts of Shantung, Foh-kien, and Kwang-tung; they are 4 or 5 inches long, and are smooth and iridescent on their inner surface; the pearly interior is levigated, and applied to opacities of the cornea. Shells with 7 or 9 foramina are most prized.—*Smith*.

HALLI, KARN. A small village or hamlet; written Hully, and added frequently to other names, as Harpan-hully. It is the Telugu Palli.

HALLIKAR, also Hal-wakkal, a tribe of the agricultural Sudra in Mysore.—*Wilson*.

HALWA, a hill race in Bustar, Bandara, and Raipur, who wear the sacred thread, which privilege those in Bustar purchase from the raja.

HALWA, HIND. A kind of sweetmeat, specially that made of honey and camel's milk, and brought from the Persian Gulf, via Bombay, in saucers. Halwai is a sweetmeat seller. Halwarang means colour of sweetmeat, pale drab, first dyed with naspal, pomegranate rind, then with catechu.

HALWAHA, HIND. In Oudh, a predial slave, employed as a ploughman. See Hal.

HAMADAN, a town of Persia, in the province of Irak-i-Ajam, 180 miles S.W. of Teheran. It is the ancient Ecbatana. It is said to have been founded by Jamshid, a king of the Peshadian dynasty. The population is about 50,000 souls. It has a delightful neighbourhood, many beautiful bazars. The mountain streams contain gold. In the centre of the town is the tomb of Ali Ben Sina (Avicenna); and not far from it are those of Esther and Mordecai, which are revered by the Jews, and kept in repair. An inscription on the tombs is that, on Thursday, the 15th of the month Adar, the building of this temple over the tombs of Mordecai and Esther was finished by the hands of the two benevolent brothers, Elias and Samuel, sons of the late Ismail Kachan. The town people make felt carpets largely.—*Kinneir*; *Menteth*; *Morier*; *Rich*; *MacGregor*, iv. p. 172; *Ferrier, Journ.* p. 35; *J. B. Fraser*, p. 221; *Porter's Travels*, ii. p. 91.

HAMAL, or Haml. ARAB. Lit. he carried. Hamilah, a pregnant woman. Hamâl, a porter, a bearer of a palanquin or tonjons. They carry it by means of the pole on their shoulders, the first man on the right shoulder, the second on the left, and so on, thus always keeping the pole steady.—*Frere, Antipodes*, p. 197.

HAMAM DASTAH, HIND. A mortar; from the Persian Hawan. See Hawang-dastah.

HAMAMELIDEÆ, witch hazels, a very small group of woody exogenous plants of N. America, Japan, China, the central parts of Madagascar, S. Africa, the Khassya mountains, and Upper Assam. Some of the species are large forest trees, affording good timber. *Bucklandia populnea* tree is found from Cherrapunji to Sururcem. *Altingia excelsa*, *Noronha*, is a large tree of Assam and Burma; the *Liquidamber cerasifolia*, *Griff.*, occurs in the Malay Peninsula; and *I. orientalis*, *Miller*, is the storax tree of Asia Minor. *Hamamelis Chinensis* is of China and the Jaintia Hills.—*Hooker, Him. Jour.* ii. p. 318; *Gambier*.

HAMD-ALLAH. ARAB. An abbreviation of the ejaculation *Al-hamd-ul-illah*! The praise be to God. It is as commonly used by Mahomedans as the *Thank God!* of the English.

HAMILTON, CHARLES, Author of a *Historical Account of the Rohilla Afghans*, London, 1787.

HAMILTON, DR. FRANCOIS, formerly Buchanan, a Bengal medical officer, who published papers in the *Linnean Society's Transactions*, author of a *Journey through Mysore*; *An Account of Nepal*; *Account of the Fishes found in the river Ganges and its Branches*, with a volume of plates. He was the first after Rhede to explore the botany of Malabar.

HAMILTON, CAPTAIN, visited Cambay in A.D. 1681, and gave an account of its quartzose minerals.

HAMILTON, WALTER, author of a *Geographical, Statistical, and Historical Description of Hindustan and the Adjacent Countries*, 1820.

HAMILTON, WILLIAM, surgeon to the embassy sent from Calcutta under John Surman and Edward Stephenson, which reached Delhi on the 8th July 1715. He was successful in his treatment of the emperor Ferokhsir, who on recovery married the daughter of Jye Singh (Ajit Singh). Hamilton died 4th December 1717, and his epitaph is of historical interest:—

'His Memory ought to be dear to his Nation,
for the Credit he gained the English
in Curing Ferrukseer,
the present King of Hindustan,
of a Malignant Distemper,
by which he made his own name famous
at the Court of that Great Monarch;
and without doubt will perpetuate his Memory
as well in Great Britain as all other
Nations in Europe.'

—Orme, ii. p. 20; Hough, p. 4.

HAMILTONIA *SEAVEOLENS.* Roxb.

Kanera, Pudari of BEAS. | Niggi, Tulenni, . RAVI.
Munkei, Kantalu, OHEKAB. | Phul, Golunda of .
Fisanni of, | Pudari of SUTLEJ.

A common shrub in the Panjab Himalaya, up to near the Indus, at from 2500 to 6000 feet. Its wood is very small; but in Chamba it is said to be used for making gunpowder charcoal.—*Dr. Stewart*; *Roxb.* i. 554.

HAMIR. The Balla race were of sufficient consequence in the thirteenth century to make incursions on Mewar, but the first exploit of the celebrated rana Hamir was his killing the Balla chieftain of Choteela.

HAMIRA. There were four distinguished leaders of this name amongst the vassals of the last Rajput emperor of Delhi; one of them, who turned traitor, and joined Shahab-ud-Din, was a Scythian of the Ghiker race, which maintained their ancient habits of polyandry even in Baber's time. The Haoli Rao Hamira was lord of Kangra and the Ghikers of Pamir.—*Tod's Rajasthan*, i. 560.

HAMIRPUR, a district in the N.W. Provinces of India, lying between lat. 25° 5' and 26° 10' N. and long. 79° 22' 45" and 80° 25' 15" E. Area, 2289 square miles. It encloses the Native States of Sarila, Jigni, and Banda. There are 62 clans of Rajputs, and the Pariahar, Chauhan, and Bais have been specially guilty of infanticide. The Chandel and Bundela, the old dominant classes, now sunk to 548 and 612 respectively,

mostly still cling to the neighbourhood of Mahoba, the seat of their former supremacy. The Bais are far the most numerous of the Rajput classes in the district. Among the Sudras the most numerous are the Lodhi, the Chamar, and the Kori. The Mahomedans are the descendants of converted Hindus, who were originally Thakurs.—*Imp. Gaz.*

HAMITE. Mr. Logan says (J. E. Ar., May to June, 1854) the earliest Hebrew ethnography indicates that the Semitic region was jointly occupied by Shemites and Hamites. Four branches of the Hamites are enumerated, viz. (1) the Cushites, embracing the tribes of Sheba, Havilah, Raamah, etc., in Southern Arabia; (2) the Ethiopian and Euphratan tribes of Nimrodians.

HAMMA-i-JOUR, literally 'joining of hands,' a Parsee ceremony practised in Pappati, similar to the English greeting of a 'Happy New Year.'—*Parsees*, p. 61.

HAMMAM. ARAB. A bath. Hammam lena, to take a bath. Public baths, usual in Turkey, Egypt, Persia, and Kābul, are unknown in India. In the middle of the 19th century there were a hundred of them in Cairo alone.—*Lane*, ii. 43.

HAMMER.

Chakuj; Matripat, ARAB. | Martillo, Ir.
Marteau, Fr. Martillo, Sr.
Hathora, HIND. Chekij, TURK.

The native sledge-hammer of Bombay is employed in breaking trap, granite, limestone, and other rocks. Its handle is generally of male bamboo, about two feet long. Its head is something like that of an ill-shapen axe,—thick all along. It weighs about 18 lbs. In the face or striking portion is a bluntish wedge of steel, fastened in with a piece of leather. With this the native quarryman will break up the most obdurate trap into slabs or blocks of almost any size or form, from a pavement flag 3 inches thick and 2 feet square, to a block 2 feet cube. He looks narrowly at the grain of the stone, and then with a series of blows, of no great force, apparently, the stone falls in pieces, seemingly without effort. Similar varieties of this, of exactly the same pattern, are used as hand hammers; they are called Sootki. The blasting, or rather the boring, tool, or jumper, is a plain round rod of iron, about three feet long, pointed at both ends with steel. No hammer is ever employed in boring. The jumper is raised and struck in with both hands, and a man will penetrate some inch or two in an hour. The native punch is a short, dumpy, lancet-pointed tool; it is sharpened by being turned point up, and struck with a piece of flint. When used in stone-dressing, it is held in the left hand, and struck with a hollow-faced iron hammer, the cavity being about an inch in depth and as much in diameter.—*Dr. Buist, Bombay Times.*

HAMPI, a ruined city, in lat. 15° 19' 50" N., long. 76° 30' 10" E., on the S. bank of the Tumbudra, 36 miles N.W. of Bellary. It is the site of an ancient capital of the Vijayanagar kings. The ruins cover nine square miles, including Kamlapur on the south, and Anagundi, a later seat of the dynasty. Hampi was founded, on the fall of the Ballala dynasty, about 1336 A.D., by two brothers, Bukka and Harihara, whose descendants flourished here till the battle of Talikot, 1565 A.D., and afterwards at Anagundi, Vellore, and Chandragiri for another century, until finally

overwhelmed by the advancing powers of Beder, Ahmadnagpur, Bijapur, and Golconda. The Vijayanagar rajas extended and beautified Hampi with many palaces and temples.—*Imp. Gaz.*

HAMP'SAGUR, lat. 15° 9' N., long. 76° 4' E., on the right bank of the Tumbudra. The level of the Tumbudra is here 1647 feet above the sea.

HAMS.

Hammen,	DUT.	Presuntas,	PORT.
Jambons,	FR.	Okoroku,	RUS.
Schinken,	GER.	Jamones,	SR.
Prosciutti,	IT.	But,	TURK.

They are largely imported into India for the use of Europeans. Many Mahomedan shopkeepers will not even sell them.

HAMSA, the god of the Druse race.

HAMSAYA. HIND. A neighbour, dependant, vassal.

HAMUN, a name for the lake of Seistan, Hamun is an Old Persian word signifying expanse.—*Ferrier, Joura*. p. 429. See Ab-Istadah.

HAMZA, uncle of Mahomed, slain by Wahsha, a negro slave. See Masailma-el-Aswad.

HAN, the 5th dynasty of China, began B.C. 206, and lasted to A.D. 264. Most of the Han princes were munificent patrons of literature. During the reign of Ming-ti, the 15th of the Han dynasty, considerable intercourse was carried on between the princes of India and China. This had obtained from the earliest period, but particularly during the dynasties of Sum, Leam, and Tam, from the fourth to the seventh centuries, when the princes from Bengal, Malabar, and the Punjab sent embassies to the Chinese monarchs. The Han dynasty of China reformed the Chinese calendar.

HANAFIYAH, a large vessel of copper, sometimes tinned, with a stopcock in the lower part, and generally with a ewer, or a basin, to receive the water.—*Burton's Mecca*, ii. 43.

HANBALI, a commentary of the Koran. The commentator was born at Baghdad A.H. 164, and died there A.H. 241, nearly 70 years old.

HAND.

Yadd,	ARAB.	Manus,	LAT.
Main,	FR.	Dart,	PERS.
Ha't'h,	HIND.	Kai,	TAM., TEL.
Mano,	IT. SP.		

The figure of the hand, amongst all nations, is utilized as an emblem.

The hand is an emblem for V., with the three central fingers folded in; and by placing the symbol below, the cardinal X. is produced. In India, amongst Mahomedans and Hindus, the right hand is more honoured than the left; in China the left hand is more honourable than the right; in Siam the right more than the left.

In British India, a person to whom you make a present, a servant to whom you do a kindness, will rush to your hand and press it to his lips. To seize a man's hand is to crave his protection, to profess yourself his servant; hence the act is one of obedience and devotion, almost of servility. The person advancing to seize the hand always does so in a stooping posture, in an attitude of humility. The giving the hand amongst all nations (Prov. xi. 21) has been considered as a pledge for the performance or ratification of some act of importance, and it was the custom amongst the Scythio or Tartar nations of transmitting its impress as a substitute; the hand being immersed in a compost of sandal-wood, is applied to the

paper, and the palm and five fingers (panja) is the signature. In Carne's letters from the East is given an anecdote of Mahomed, who, as erroneously supposed, unable to sign his name to a convention, dipped his hand in ink, and made an impression therewith, but Mahomed only followed an ancient solemnity, or custom, for all Mahomedans occasionally stamped or sealed their epistolary communications with the print of their hand. Hyder Ali often did it. It was considered a solemn form of signature. The panja, or palm and five digit form hand, of the Mahomedans, is used at the Maharran in erect Panjah flags or Alam, in the name of Husain and other martyrs.—*Tod's Rajasthan*, i. p. 362.

HANDI. HIND. A cooking-pot or kettle made of pottery, of the same shape as a deggha, which is of brass.

HANDKERCHIEF.

Mouchoir,	FR.	Fuzzoletto,	IT.
Tuch, Schnupftuch,	GER.	Panullo,	SR.
Rumal,	HIND.	Mendil, Mahrama,	TURK.

Handkerchief pieces form a considerable article of manufacture and traffic in Southern India. Handkerchiefs, coloured, from Madras, red from Sydapet and Ventapollen, are much admired for the harmony and richness of the colours, and the superiority of texture. Nellore pocket-handkerchiefs of jean deserve unqualified approbation. The silk handkerchiefs manufactured in Bengal are known in the market as Bāndana, Kora, and Chapa. They are generally figured, and of different colours. They are exported chiefly to the Burmese territories, and sold at from 1½ to 5 rupees each. The coloured cotton handkerchiefs manufactured at Ventapollen, on the east coast, are well known in foreign markets, were formerly highly prized for their superior qualities and colours, but they have been driven from the markets by the Madras and Pulicat manufactures, which the community prefer for their superior qualities and colours. Madras handkerchiefs of superior kinds are sold at 1½ rupee each, and inferior sorts at 4 annas to 12 annas; the colour of the last description is very perishable. The ordinary colour of the Madras handkerchiefs is red, and Mahomedans and Hindus prefer them to those of other countries. The principal site of the manufacture of silk handkerchiefs for the head is Seringapatam in Mysore; they are of superior quality, and of red and pink colours; they are in squares of 6 cubits, and are, in consequence of their gold lace borders, sold at 35 to 100 rupees each.—*Mad. Ex. J. Rep.*

HAND-MILL.

Meula,	FR.	Mola,	IT.
Chakki,	HIND.		

The grinding at the hand-mill is noticed in Exodus xi. 5, Isaiah xlvii. 2, and Matthew xxiv. 41. It is the quern of the Gael. In all the south of Asia, in small families, the labour of one person suffices to grind enough for the day's consumption; but where the inmates are more numerous, two people sit on the ground with the hand-mill between them. A single person, to cause the upper stone to revolve, has to pull it towards and to push it from her; but when two are working, each pulls towards her side. The Old and New Testaments notice the process, but it is well described in the 47th chapter of Isaiah. It is a heavy task, but they lighten

it by their labour-songs, and they work from the earliest morning hours, 2 or 3 A.M.

HAND-PLANT, *Cheirostemon platanoides*, *H. B. K.*, venerated by the ancient Mexicans, from the singular resemblance to a clawed hand presented by the curved stamens of the flower.

HANDRO. **HIND.**? A tree of Chutia Nagpur, with hard, red timber.—*Cal. Cat. Ex.* 1862.

HANGI. **HIND.** A large horse-hair sieve, used by silk-dyers.

HANGRANG PASS, lat. 31° 47' 7", long. 78° 30' 6", in Kanawar, W. of the Sutlej, leads over to Spiti. The top of the pass is 14,530 feet above the sea, according to the G. T. S.

HANG TUAH, a celebrated champion of Java, called the *Laksamana*. He must not be confounded with the *Laksamana* of the Portuguese writers, as the latter lived several generations after the first, who accompanied king Mansur to Majapahit.

HANIA. **ARAB.** An Arabic salutation, meaning, May it be good to you.

HANIF, an expression employed in the Koran by Mahomed, to signify that he followed the pure and catholic faith of Abraham. One Mahomedan theological sect is called Hanifi. The Hanifi theology chiefly holds by the religion of Abraham.

HANIFAH, a commentator of the Koran, was born at Kufa A.H. 80, and died at Baghdad, in prison, A.H. 150, nearly 70 years old.

HAN JIN and **Tan Jin**, men of Han or of Tang, from the dynasties of those names.

HANKA, also *Anküs*. **HIND.** The elephant-driver's spear-goad.

HAN-KOW, **CHIN.**, means mouth or port of the Han. See *Yang-tze-kiang*.

HANLE TSO, a fresh-water lake in Ladakh, in lat. 32° 48' N., long. 78° 54' E., at the monastery of Hanle, 14,600 feet above the sea. This is the largest sheet of fresh water in Ladakh.—*Cunningham's Ladakh*, p. 142; *Schlagentweit*.

HAN-LIN-YUEN, the Imperial Academy of China, founded by *Kublai Khan*. For 600 years the small body of Han-lin scholars have held their sessions undisturbed by dynastic revolutions or political outbreaks. No learned society in the world can compete with it in age or in its intense exclusiveness. The examinations being open to all, and forming as they do the only recognised channel to official rank, every man in the empire who aspires to end his days as something more than a plebeian, enters the lists. At the first competition, which consists of five sessions separated by intervals of a few days each, and which is held annually in the chief city of each district, about 2000 candidates generally present themselves. Out of this number from 20 to 80 of the best are chosen, and on these are conferred the degree of *Siu-ts'ai*, or 'budding genius.' Every third year the budding geniuses from every district in each province—and there may be 70 or 80—go to the provincial capital to appear before an imperial examiner as candidates for the next degree of *Ku jin*, or 'promoted scholars.' On this occasion 5000 or 6000 competitors contest the honour of being the one in each 100 who, as the ripest scholar, is admitted to the further degree of *Ku jin*. In company with all those who have won similar honours in the capital of the 18 provinces of the empire, the successful *Ku jin* goes, in the succeeding spring, to Peking, where, if

fortune attend him, he wins the distinction of becoming a *Tsin shi*, or 'one ready for office.' In agreement with this descriptive title, the new *Tsin shi* may, if they please, ballot for the vacant junior mandarinates, for which they have now shown themselves qualified, and from which they may rise by their own exertions to seats in the Grand Council of State, or to places in the imperial cabinet. But, if desirous of still further distinguishing themselves as scholars, and of obtaining the honour of places in the Imperial Academy, the 200 or 300 survivors of so many contests present themselves at the palace, where they are examined by the emperor in person. Out of this number about 20 are chosen whose scholarship is the ripest, whose penmanship is the best, and whose literary style is the most perfect, and to these are given seats among the Immortals of the Han-lin. On one only of these 20, chosen out of the 300 million inhabitants of the empire, *la crème de la crème*, is conferred the signal title of *Chwang-yuen*, or model scholar of the empire. Once in three years is this degree granted; and so supreme is the prize, that provinces contend for it, and the birthplace of the victor becomes famous for ever. The instant that the imperial award is given, heralds carry the news at express speed to the friends of the laureate. We have, says Dr. Martin, seen them enter a humble cottage, and, amid the flaunting of banners and the blare of trumpets, announce to its startled inmates that one of their relations had been crowned by the emperor as laureate of the year. And so high was the estimation in which the people held the success of their fellow-townsmen, that his wife was requested to visit the six gates of the city, and to scatter before each a handful of rice, that the whole population might share in the good fortune of her household.

Members of the Han-lin are appointed the official poets and historians of the reigning dynasty, and every imperial compilation undertaken is the work of these men. It was they who edited the famous dictionary of the language which added a lustre to the reign of *K'ang-he* (1661-1721), and who, at the bidding of the Emperor *K'een-lung* (1755-1795), compiled the celebrated encyclopædia in 5020 volumes, one of the few existing copies of which is now in the library of the British Museum. To act as examiners at the competitive examinations, and as literary chancellors in the provinces, form part also of their duties, as well as composing prayers for the use of the emperor on occasions, writing inscriptions for the temples of various divinities, in acknowledgment of services, and choosing honorific titles for members of the imperial household.

The holders of hereditary titles are so few, that their existence cannot be said to impair the assertion that the holders of official rank form the only aristocracy in China. Unlike the aristocracy of other lands, this charmed circle is, according to law, only to be entered by winning distinction at the examinations; and as these are open to every man in the empire, of whatever age and of whatever station in life, except the very outcasts, the highest prizes are as freely accessible to the peasant or shopman, as to the sons of the loftiest dignitaries. China may thus be said to be a democratic empire, tempered by an aristocracy of talent.—*Dr. W. A. P. Martin, The Chinese*,

their Education and Letters; Huc, Chinese Empire, i. pp. 19, 95.

HANNAMANTU'S PILLAR. About 50 feet west of the high road from Kurnool to Gooty, 50½ miles from Kurnool town, stands this natural pillar of gneiss rock. There is scarcely such another in the world. Amongst a few smaller pillars of a similar kind, it towers 25 feet high, averaging 6 feet square. This average width is exceeded in the middle, and tapers off towards both ends; so that the top is 4 or 5 feet square, and the base about 3 feet square. It is all solid, except that the upper 4 or 5 feet is separated from the rest of the pillar by a fine horizontal crack. The most striking part of it is, that it does not stand on its base fully, nor even upon half of it. A string 10 feet long will encircle the whole of the bearing points of the base, which all lie within a space about 3 feet long and 2 feet wide, in the form of a truncated right-angled triangle. This is a small base for a pillar weighing as much as a couple of locomotive engines with their tenders complete. Yet even on this small base, if, as appears likely, the centre of gravity falls about the centre of the base, it will require a wind-pressure of 80 lbs. on the square foot to overturn the pillar. Years ago, some Hindu enthusiast painted a figure of the monkey god on this pillar. Recently some iconoclast has been removing the figure, by flaking off the stone in a very destructive way.—*Traveller.*

HANNO, according to Pliny, a native of Carthage. When that city was at the height of her prosperity, he circumnavigated the continent of Africa, sailing from Gades (Cadiz) to the extremity of the Arabian Gulf. He wrote all the details of his voyage in the Punic language.

HANOMOREY, betle-box bearers of Oovah in Ceylon, a race or caste held to be more degraded than the Rodiya.—*Tennant.*

HANSA or **Hanasa**.

Gans,	GER.	Hanza,	PALL.
zan,	GR.	Ganso,	PORT.
Anser,	LAT.	Ansar,	SP.
Gangsa,	MALAY.		

A swan, a goose. When the followers of the first crusade issued from England, France, and Flanders, they adored a goat and a goose, which they believed to be filled with the Holy Ghost. Salu, translated quails in Numbers xi. 31, are supposed to be red geese. Brahma is styled the Hansa rider, it being his vahan or vehicle. The figure on many Buddhist monuments is the Casarca rutila, or Brahmany goose. The goose is emblazoned on the national standard of Burma.

HANSI, a municipal town of Hissar district, Panjab, and headquarters of the Tahsil, lat. 29° 6' 19" N., long. 76° 0' 19" E., population (1868) 13,563. Dr. Hunter says it was founded, according to tradition, by Anang Pal Tuar, king of Dehli. Colonel Yule says it was founded by Raja Pethora of Dehli. It was captured by Mahmud of Ghazni, A.D. 1035. The well within the lower fort, or fausse braye, is 120 feet deep. In the centre of the upper fort is a cistern capable of containing 184,000 gallons. It was the capital of George Thomas, who raised himself from being a sailor before the mast to be ruler of a small Indian principality.—*Yule, Cathay*, ii. p. 406; *Imp. Gaz.*

HANSRAJ. **HIND**. *Adiantum caudatum*, *A. capillus veneris*, *A. venustum*, the pari-soosa or mu-i-pari, fairy-hair ferns, the leaves of which are

deemed by the natives of India heating and febrifuge.—*Gen. Med. Top.* p. 127.

HANTU. **MALAY**. A spirit, a ghost.

HANUMAN, a Hindu deity. From Hanu, the cheek, Hanuman means long jaw. His figure is that of a man with a black monkey face and a long tail. Hanuman or Hanumat, in Hindu mythology, is son of Pavana, the wind, by Anjana, wife of a monkey named Kesari, called also Lanka-dahi, also Yoga-chara, Marut-putra; and he has the patronymics Anili, Maruti, and the matronymic Anjaneya. His images are set up in temples, sometimes alone, and sometimes in the society of the former companions of his glory, Rama and Sita. He is supplicated by Hindus on their birthdays to obtain longevity, which he is supposed to have the power to bestow. As the god of enterprise, offerings are made at his shrine by night. Hanuman is said to be a son of Siva. He is fabled to be the son of the wind, and is called Maruti, from Pavana being chief of the Marut, or genii of the winds. He is also called Muhabar. As the monkey-general who assisted Rama in his war with Ravana, he is regarded and worshipped as a demi-god. Both Hanumanji and Boosundi are said to have their lives protracted through the four yuga of Hindu chronology. Boosund was a crow who had more blood than he could drink in the wars of Sambhu and Nesambhu. He just quenched his thirst with blood in the wars of Rama. But in the wars of the Mahabharat he broke his beak by striking it against the hard dry earth, which had soaked in the little blood shed on the occasion. In 1868, Bala, petail of Assaye, who was five years old when Sir Arthur Wellesley fought the battle, was the pujari of the temple in which the editor put up. Bala daily walked in and poured water on the lingam (Abishegam), also on Hanuman and on the bull (Basava); then put rice on all these, then walked around five times, then put rice on the tulsis, and the worship concluded.—*Tr. Hind.* ii. p. 207; *Col. Myth.* p. 59; *Dowson.*

HANUMAN, the Bengal langur, Presbytes entellus of Bengal and Central India. The males live apart from the females, whom they visit at seasons. See Presbytes.

HANUMAN NATAKA, a long drama on the adventures of Hanuman, by various hands, completed by Damodara Misra, by request of King Bhoja, in the 10th or 11th century.

HANXLEDEN and Paulinus a Sancto Bartolomeo whose real name was Philipp Wesdin, in 1790 published the first Sanskrit grammar.

HAOU? TSING! TSING! The Chinese salutation on meeting, meaning literally, Are you well? hail! hail! See Chin.

HAPTA HINDU, of the Vendidad, is the modern Panjab, the Hapta Sin or Hapta Hin, or the seven rivers, called in the Vedas the Sapta Sindhava. These consist of the Sindhu or Indus, with its six eastern confluent, viz.:

Vitasta or Hydaspes.	Vipas or Hyphasis.
Asikni or Acesenes.	Satadru or Hecydrus.
Parushni or Hydrates.	Kubha or Kophen.

In the journeying of the Aryan race, their fourteenth settlement was in Hapta Hindu (Panjab, vi. 19), the land of the seven Hinda, that is, the country between the Indus and Sutlej. In the Vedas, the country of the five rivers is also called the land of the seven rivers. The traditional Greek names also are seven. The Indus

and the Sutelj are each formed by the junction of two arms, which in their earlier course were independent. According to this view, it stands thus:—

- | | |
|--|----------------|
| 1. Kopha (Kubha), . . . } | I. Indus. |
| 2. Indus, Upper, . . . } | |
| 3. Hydaspes (Bidaspa), . . . } | II. Hydaspes. |
| 4. Akesina (Asikni), . . . } | III. Akesines. |
| 5. Hyarotis (Hydraotis, Iravati-Parusni), . . . } | IV. Hydraotes. |
| 6. Hyphasis (Vipasa), . . . } | |
| 7. Saranges (Upper Sata-dru, Sutelj, Ghara), . . . } | V. Hyphasis. |

Ritter supposes that the country extended as far as the Saravati, but such a supposition is at variance with history. It is now ascertained from the Vedas that the Aryans passed the Sutelj at a very late period, and settled in what is now India. It was not till their fourteenth settlement, after the migration from the primitive country in the north, that they passed the Hindu Kush and the Indus. The previous resting-places form an unbroken chain of the primitive abodes of the Aryans.—*Dunsen*, iii. 466, 487. See Aryans.

HAQ. ARAB. Right, truth; also an attribute of the deity, Al Haq, the true God, a word in frequent combination. Haq also means any right or due to which a person is entitled. Haq-dar, a person entitled to any right. See Sufl.

HAR. HIND. A necklace; a necklace of honour.

HAR, the Rajput god of war, is Kumara. In the Hindu mythology he is represented with seven heads; the Saxon god of war had six. The six-headed Mars of the Cimbric Oheronese, to whom was raised the Irmanseul on the Weser, was worshipped by the Sacasene, the Catti, the Siehi or Suevi, the Jete or Gete, and the Cimbric, evincing in name, as in religious rites, a common origin with the martial warriors of Hindustan. The Rajput delights in blood; his offerings to the god of battle are sanguinary,—blood and wine. The cup (cupra) of libation is the human skull, the calvarium. He loves them because they are emblematic of the deity he worships; and he is taught to believe that Har loves them, who in war is represented with the skull to drink the foeman's blood, and in peace is the patron of wine and women. With Parvati on his knee, his eyes rolling from the juice of the p'fool and opium, such is this Bacchanalian divinity of war, who is a perfect analogue of the manners of the Scandinavian heroes. The Rajput slays buffaloes, hunts and eats the boar and deer, and shoots ducks and wildfowl (ookru); he worships his horse, his sword, and the sun, and attends more to the martial song of the bard than to the litany of the Brahman. In the martial mythology and warlike poetry of the Scandinavians, a wide field exists for assimilation; and a comparison of the poetical remains of the Asi of the East and West would alone suffice to suggest a common origin. The cupra of Har, a human skull, the calvarium, in the dialects pronounced cupar, is the cup in Saxon. The cup of the Scandinavian worshippers of Thor, the god of battle, was a human skull, that of the foe, in which they showed their thirst of blood; and Har, the Hindu god of battle, leads his heroes in the 'red field of slaughter' with the cupra in his hand, with which he gorges on the blood of the slain. The Gosain are the peculiar priests of Har or Bal; they seem all to indulge in intoxicating drugs, herbs, and drinks.—*Tod's Rajasthan*, i. 67.

HAR, *Terminalia chebula*, and other three species, furnish all the discarded myrobalans of old pharmacopoeias. The whole are much used in dyeing. The myrobalan from Dehli and Harowti, Hindustan and the Dekhan, are of four kinds, namely, Gural harra, astringent and purgative, used in mesalils, given in medicine to children, 4 seers for 1 rupee; Juwal harra, used in the same way, 8 seers for 1 rupee; Chapel harra, used only in dyeing, 10 seers for 1 rupee. According to the size of the myrobalan, its value augments, so that a very large one may be worth 100 rupees or more, the natives believing that the very large ones have the virtue of causing purging by being merely retained in the hands, and is esteemed to possess wonderful general deobstruent and purgative qualities, etc. etc., but is in reality worthless.—*Genl. Med. Top.* pp. 136, 158.

HAR. HIND. A plough; enters into the composition of many words. See Hal.

HARA, a name of Siva or Mahadeo.

HARA, a mountain range. See Hala.

HARA, a branch of the Chauhan Rajputs, who give their name to Haraoti, which includes Kotah and Bundi. The Hara Rajputs have held Haraoti through all dynastic changes. Bundi is their capital, and they claim descent from the family that ruled in Ajmir before the Mahomedan conquest in 1342. The Hara Rajput is above the middle height, with graceful and well-proportioned limbs. He is wiry, upright, with a commanding presence; with an air of pride and haughty superiority over all men, but devoted to their chiefs. The face is well shaped; nose and mouth finely cut; eye small and long, bright and clear, but not indicative of high intellect. The Hara Rajput partakes freely of tobacco, spirits, and opium, fish, and flesh of all kinds, except that of the cow or buffalo; but thick and coarse cakes of flour form the chief food, with vegetables and milk. This Hara branch of the Chauhan dynasty are descended from Anuraja, a son of Visaldeva, or more properly of Manakya Rai (Tod, ii. p. 454), who in A.D. 695 founded Sambhur, hence his title of Sambri Rao. In A.D. 1024 Anuraja took possession of Asi or Hansi, in Hariana. The Bundi branch of this family reckon from Rao Ratan, who built Ratanpur, the name of the chief town, in 1578 to 1821, in which year was Ram Sinh. The Kotah branch reckon from Madhu Sinh, son of Rao Ratan, in A.D. 1579, to Kiswar Sinh, Madhu Sinh, regent, in A.D. 1819.—*Thomas' Prinsep*, p. 249; *Captain W. H. Beynon*, in vol. vii., *People of India*.

HARA. ARAB. A quarter of the city in Cairo. Every quarter has its shaikh, called Shaikh-ul-Hara. The whole city is also divided into eight districts, over each of which there is a shaikh.

HARAI is the most important of the hill chiefships or zamindaris in the north of the Chindwara district.

HARAKAT. ARAB. Trouble, inconvenience. Under British rule in India, Harakat na hul, barakat hui, Trouble there has been none, blessing hath there been.—*Burton's Mecca*, i. 11.

HARA KIRI is from HARA, JAPANESE, the belly, and Kiri, root form of Kiru, to cut; a self-immolation by disembowelling, a mode of self-execution adopted in Japan. Practically, they make only a small wound in the belly, and in the act of so doing a relative or other person, whom they have

selected, cuts off their head with a sweep of a sword. In 1869, when Taki Zenzaburo was permitted by the Mikado so to die, because he had ordered the Europeans to be fired upon at Kohe, he wore a dress of ceremony and a zimbaori coat. He advanced to the high altar and prostrated himself twice, with his pupil on his left to act as the kaishaku or beheading friend. He was presented with the waki-zachi, short sword or dirk, 9½ inches long, which the victim raised to his head and placed in front of himself. He then confessed aloud, 'I, and I alone, unwarrantably gave the order to fire on the foreigners at Kohe, and again as they tried to escape. For this crime I disembowel myself, and I beg you who are present to do me the honour of witnessing the act.' Bowing again, he let his clothes fall to the waist, then took the dagger, and, stabbing himself below the waist on the left side, he drew it slowly across to the right side, and, turning the dirk in the wound, he gave it a slight upward turn. He then drew out the dirk, leant forward, and stretched out his neck. At that moment the kaishaku sprang to his feet, and with one blow severed the head from the body, made a low bow, wiped his sword, and retired. The stained dagger was then solemnly borne away as proof of the execution. The Samurai, or gentlemen of the military class, are trained from infancy to regard this self-execution as an honourable form of expiation. In some parts of Japan, as the victim criminal stretches out his hand to take the wooden dagger, the kaishaku strikes off his head; or a Daimio disembowels himself and cuts his own throat.—*Mr. Mitford in Cornh. Mag.*, Nov. 1869; *O'phunt*, ii. 147; *Manners and Customs of the Japanese*, 193.

HARAM. ARAB. Sacred; the most sacred place of a temple or a palace; the seraglio of a great man. Harmain, the holy cities of Mecca and Medina. In Arabia, Egypt, and Turkey, the Harām or Harim means the female part of the family, and the word is used to avoid the indecorum, in the eyes of a Mahomedan, of mentioning his wives or daughters. It is likewise the name for that part of the house where the females dwell. Mahomedans are so scrupulous to avoid speaking personally of their female relations, that, when obliged to refer to them, they say, 'My house is sick,' or 'My house sends compliments to your house.' The haram in India means a purchased woman associating with her master. In Arabia, the haram woman would be a slave woman taken in war.—*Rich's Kurdistan*, i. p. 2.

HARĀM, in India, unlawful, forbidden; whatever the Mahomedan law disallows; unlawful food, such as pork, wine, mushrooms, etc., hence Harāmī and Haramzādāh, a vicious, wicked man or beast.

HARA-MUK or Gunga bul, TIB., means literally place of the Ganges, and is a sacred lake on the mountain of Haramuk, in Kashmir. It lies under the wildest and most lofty peaks of the mountain, is 1½ mile long and 200 or 300 yards wide, and is about 12,000 feet above the level of the sea.—*Vigne*.

HARAN, the present Karra, a day's journey south of Odessa, to which Abraham went from Ur of the Chaldees. It is the capital of a Turkish pashalik, which extends in a north-west direction from the mouth of the Shat-ul-Arab to the rocks of Merdin, the Baghdad frontier towards Con-

stantinople. In an east and west line it stretches from the confines of Persia to the banks of the Khabour, which separates it from the pashalik of Orfa, the Osrhoene of the Romans, and that part of Mesopotamia which contained the Haran of Abraham, and the famous Edessa of the crusades.—*Bunsen*, iii.

HARAND, a district in Eastern Baluchistan bordering on the Indus. It is one of the three eastern sections of Baluchistan. Harand and Dajil, in Cutch Gandava, are inhabited by the Gurchani tribe of Rinds, and have the Muzari on their south.

HARAQUAITA is the Arachosia of the classics, the country of the Rachos, with whom the immigrant Aryans came in conflict, and who have been turned into the fearful Rakshasa of popular Hindu belief. According to General Ferrier, Arachosia can be distinctly shown by the Greek measurements to have been at the ruins of Shahr-Zohak or Olan Robat, between Kilat-i-Ghilji and Mokoar. According to Ch. Bunsen, Haraquaita is south of Kabul, and is the Harauvati of the cuneiform inscriptions, and the Arachosia of the classics. It was the ninth settlement made by the Aryans (verse 13) in a country which they conquered, and it was here that they commenced to inter their dead, which the Zendavesta strictly prohibits, as being the greatest desecration of the sacred earth—an apostasy, therefore, from the true faith. The Arachotia mentioned on the coins of the Indo-Greek rulers was Kandahar. The Haraquaita of the Zend language is the Saraswati of Sanskrit writers, the Greek Arachotos, and the Chinese Tsankuta.—*Bunsen*, iii. 464 to 485; *Ferrier's Journ.* p. 323.

HARAWAL. TURK. The advanced guard of an army; the officer commanding it.

HARB. ARAB. Battle. Harbi, martial, valiant. In Mahomedan law, Dar-ul-Harb is a non-Mahomedan state, not subject to Mahomedan rule, and, although at peace, an incessant object of hostilities. Dar-ul-Islam is a Mahomedan state.

HARB, an Arab tribe who warred with Mahomed. Mahomed is fabled to have resuscitated those killed in the war by the application of balsam of Mecca.

HARBOURS. Captain Taylor gives a list of 656 ports and harbours in British India, the chief of which are—Karachi in Sind; on the west coast of India are Poshetra and Serai, in the Gulf of Cutch; Chuch Bandar or Shalbet, on the south coast of Kattyawar, 30 miles east of Diu Head. It is formed by Shalbet Island. Bombay harbour is the best on the west coast. Jyghur and Vizadrag is south of Bombay; Karwar is the port of N. Canara. Cochin harbour is kept clear by its splendid backwater, which acts as a tidal reservoir. Kolachul, on the Travancore coast, has some outlying rocks, and large ships can ride at anchor to leeward of them in still water. Tuticorin, in the Gulf of Mannar, is the port for all the large trade of Tinnevely, but vessels have to lie 2½ miles from the shore. Chittagong harbour or port is 10 miles up the river Karnfuli. It is one of the best ports in India. The Hoogly, the Irawadi, and the Moulmein rivers are much resorted to.

HARBURENNI and other places in Ceylon have numerous rock inscriptions in the Pali language, from 104 B.C. to twelfth century, in the Lat to the modern Tamil character. Religion

mentioned is Buddhist. Sir Wilmot Horton says there are thousands of these inscriptions in Ceylon, and they exhibit the Deva Nagari in all its transitions. The inscriptions would appear to be much defaced, and little is yet made of them.—Vol. v. p. 554.

HARDAUL-LALA, a chief of Bundelkhand, whose spirit, according to the natives of Northern India, visited the camp of Lord Hastings with cholera in consequence of the slaughter of cows in the grove where the chief's ashes were interred. Hardaur or Hardaul is the name given to the earth mounds on which a flag is placed, raised to avert epidemic disease from the villages of N. India.—*Wilson*.

HARDEHA. **HIND**. A tribe of the Koch'hi.

HARDINGE, **VISCOUNT**, G.C.B., a general officer of the British army, who distinguished himself in the Peninsula under the Duke of Wellington. He took the office of Governor-General of India, 23d July 1844, and held it till the 12th January 1848. He endeavoured to preserve peace, but, after the death of the Maharaja Ranjit Singh, the Sikh nation had been agitated, and anarchy followed. On the death of Kurruck Singh, the Sikh army freed themselves from all control, and 50,000 men invaded British territory, and they began to cross the Sutlej on the 11th December 1845. Lord Hardinge had left Calcutta on the 22d September, and placed himself under the orders of Sir Hugh Gough; and on the British Indian army arriving at Moodkee on the 18th December, they found the enemy advancing in order of battle, and the battle that ensued lasted from three in the afternoon until nightfall. The Sikh army lost seventeen guns and several thousand men. In this battle Sir Robert Sale fell. The Sikhs retreated to Firoz Shahar, where for three days they were throwing up entrenchments around their camp. On the 21st December Sir Hugh Gough attacked their entrenchments, and the British army and its generals bivouacked on the field, exposed throughout the night to the fire of the enemy. The battle was renewed next day, and terminated in the success of the British, the camp being taken, after a long and bloody conflict. Prince Vladimir of Prussia was present in this engagement, and his physician, Dr. Hoffmeister, was killed.

The Sikh army retired to the right bank of the Sutlej opposite Lodhiana, which Major-General Sir Harry Smith was sent to protect; and in the subsequent movements the Sikh army opposed him at Aliwal on the 28th January 1846, but were defeated with great loss, and the left bank was cleared. Sir Harry Smith rejoined the commander-in-chief, and on the 10th February 1846 the battle of Sobraon was fought and won, but with great loss on the part of the British,—thirteen officers were killed and above one hundred wounded. A treaty was signed, transferring all the country between the Sutlej and Beas, and afterwards modified to the Beas and Indus. Raja Dhulip Singh was reinstated on the throne, and Raja Gulab Singh made independent, and granted Kashmir and other territory. Sir Henry Hardinge was created a viscount, Sir Hugh Gough a baron, and Sir Harry Smith a baronet. Lord Hardinge returned to England, and was succeeded by Lord Dalhousie.

HARDWAR, ancient historical town and place of Hindu pilgrimage in Saharunpur district, N.W. Provinces, lat. 29° 57' 30" N., long. 78° 12' 52" E.; population (1872), 4800. It was originally known as Kapila or Gupila, from the sage Kapila, who passed his life in religious austerities at the spot still pointed out as Kapilasthana. Hardwar, or Hari-dwara, literally Vishnu's Gate, seems to be of comparatively modern origin, as both Abu Rihan and Rashid-ul-Din mention only Ganga-dwara, or the Ganges gorge (literally, gate). Tom Coryat visited the place, and described it as 'Hari-dwara, the capital of Siva.' The level of the Ganges at Hardwar is 1024 feet. The Ganges falls rapidly to Hardwar, which is 1300 miles from the mouth. It is a great place of pilgrimage, the pilgrims often occupying the valley of the Ganges to a length of nine and a depth of two miles from the village of Doodea past Hardwar and Myapore to Kunkul and Joolapore. Its celebrity is owing to the proximity of the Rikikase gorge, from which the Ganges escapes from the Siwalik Hills of the Himalaya mountains, thirteen miles above Hardwar. It was a scene of sacred rites long before either Sivaism or Vishnuism developed in their present forms. As the spot where the Ganges issues forth on its fertilizing career, Hardwar obtained the veneration of each of the great religions of India, and preserves the memorials alike of Buddhism, Sivaism, and Vishnuism, and of rites perhaps earlier than any of them. A dispute exists to this day between the followers of Siva and Vishnu as to which of these deities gave birth to the Ganges. The Vishnu Purana is cited by both, as it ascribes the Ganges to Vishnu, and the Alaknanda, or eastern branch of the Ganges, to 'Siva's Gate;' the Vishnuvites maintain that it is Hari-dwara, 'Vishnu's Gate.' The great object of attraction at the present day is the Hari-ke-charan, or bathing ghat, with the adjoining temple of Ganga-dwara. The charan, or footmark of Vishnu, is imprinted on a stone let into the upper wall of the ghat, and forms an object of special reverence. Each pilgrim struggles to be the first to plunge into the pool after the propitious moment has arrived, and stringent police regulations are required to prevent the crowd tramping one another to death, and drowning each other under the sacred water. In 1819, 430 persons, including some sepoys on guard, lost their lives by crushing in this manner, after which accident Government constructed the present enlarged ghat of sixty steps, 100 feet in width. Riots and bloody fights were of common occurrence amid the excited throng. In 1760, on the last day of bathing (10th April), the rival mobs of the Gosain and Bhairagi sects had a long-continued battle, in which the almost incredible number of 18,000 are said to have perished. In 1795 the Sikh pilgrims slew 500 of the Gosains. In 1829, Gosains fought their way to the Ganges, and many were killed. The great assemblage of pilgrims takes place on the first day of the month of Baisakh, the commencement of the Hindu solar year (March—April), and the anniversary of the day upon which the Ganges first appeared upon earth. Every twelfth year, the planet Jupiter, being then in Aquarius, a feast of peculiar sanctity occurs, known as a Kumbh-mela, and is attended by an enormous concourse of people. The ordinary number of pilgrims at the annual

fair amounts to 100,000, and at the Kumbh-mela to 300,000.

Pilgrims come to Hardwar from all parts of Hindustan and Bengal, from the Dekhan, the Panjab, from Kashmir, Afghanistan, Tartary, Tibet, and China, some as religious devotees, some as worldly tradesmen. For miles around the place it is one immense encampment. Colonel Yule has seen Buddhist pilgrims at Hardwar who had crossed the Himalaya from Maha-Chin, as they said, to visit the holy flame of Jawalamukhi in the Panjab. A great attack of epidemic cholera occurred at Hardwar in 1783, when 20,000 people died in eight days.—*Yule's Cathay*, p. 411; *Taylor's Visit*, p. 177; *Imp. Gaz.*

HARDWARE.

Isenkramvarer, . . . DAN.	Chincaglio, . . . IT.
Yzerkramery, . . . DUT.	Quincalharia, . . . PORT.
Clinquallerie, . . . FR.	Mjeloizchnue Towar-
Quincailerie, . . . " "	wii, . . . RUS.
Kurze waaren, . . . GER.	Quinquillaria, . . . SP.
Loha kam, . . . GUJ., HIND.	Jarnkram, . . . SW.

In commerce, goods of every kind made from metal.—*M'Culloch*.

HARDWARI PEORI, or Indian yellow, is the dried deposit precipitated from the urine of cows that have been fed on the leaves of the mango (*Mangifera Indica*). It consists principally of magnesia and purreic acid, as it has been called by Sir R. Kane. On treating a solution with weak muriatic acid, after evaporation, yellow scaly crystals of purreic acid are obtained. Hardwari peori is usually met with in the bazars in lumps. Wilayiti peori is chrome yellow, in lumps (chromate of lead). Hardwari indicates the locality where it is obtained. A dye made of the Harsinggar is sold under the same name.—*Powell, Ec. Pr. Panj.* p. 195.

HARDWICKE, MAJOR-GENERAL, a distinguished zoologist, who was employed in Northern India in the early part of the 19th century. His collection was described by Dr. Gray of the British Museum, in one volume.

HARDWICKIA BINATA. *Rozb.*

Caratchu, Kamra, . . . CAN.	Kar-atchi, Kat-udugu, TA.
Anjun, . . . MAHR.	Epe, Nara epe, . . . TEL.
Atcha, Attimaram, TAM.	

This large leguminous tree grows in the forests of the Godavery, in the Nullamallay, on the mountains of the Coromandel coast, in some parts of Kandesh, in the Padshapur jungles, in the Guzzelhutty pass, common in Lulling pass between Malligaum and Dhoolea, and on the hills of the Sone valley. It is a most elegant tree, tall and erect, with an elongated coma, and the branches pendulous. On the Godavery it is often hollow in the centre. Yields a timber of an excellent quality for beams, and a variety of uses. The wood is red or dark-coloured, very hard, very strong and heavy. As the shoots grow up very straight, it is also valuable for rafters. The bark yields a strong fibre, and the people of the island of Siva Samudram use it without further preparation.—*Rozb.*; *Voigt*; *Mr. Rohde's MSS.*; *Hooker's H. J. L.* 50; *W. and A.*; *Beddome*; *Dr. Gibson*.

HARDWICKIA PINNATA. *Rozb.* This very large tree is very common on the S. Travancore ghats (Aaambu Hills), in the dense moist forests, up to 3000 feet elevation, and is also found on the Tinnevely side, just above Courtallum (between the 2d and 3d falls), and on the new Manjerabad

ghat (S. Canara), about 1500 feet up from Siradi. The tree yields a dark red balsam, which is used medicinally. A deep notch is made into the heart of the tree, and after a time it begins to flow. The tree flowers in March and April, and the legumes ripen in July. The wood is much used by the coffee planters and others for building purposes.—*Rozb.*; *Beddome, Flora Sylv.* p. 255.

HARE.

Arneb, ARAB.	Lepre, IT.
Lièvre, FR.	Liebre, SP.
Hase, GER.	Rzhong, TIBET.
Arnebeth, HEB.	Tawshan, TURK.

See *Lepus*; *Mammalia*.

HARGILA, the Bengali name of the adjutant bird, said to be from Har or Hur, a bone, and Nigalua, to swallow.

HAR GOVIND, a Sikh guru. See *Guru*.

HAR-HAR, a subdivision or part of an estate. In Sauror it means the cultivated space immediately round a village, which is quite opposed to the meaning it generally bears in the N.W., where it is applied to the land most distant from the site of the village, i.e. beyond the Mungha. In Bundelkhand and some other places it signifies a tract of land, but the term in no way indicates separate possession of the tract designated.—*Elliot, Supp. Gloss.*

HARI, the ancient Arya, the country of Herat, is the western province of Khorasan.—*Bellenc.*

HARI, a name of Krishna as an avatar of Vishnu. Hari, Hari-bol, amongst Hindus, a shout of applause.

HARI. The great harvests are called in Hindi rabi and kharif, or by the Northern Hindu villagers hari and sawani, from the names of the months in which the crops are ripe. Rabi is the spring harvest, kharif the autumn; but it is not all land that bears two harvests. Land that does so is called do-fasli, and land that only bears once, ek-fasli; but there are certain tracts of country where two or even three harvests are taken off the soil. The principal crops of the rabi are the cold-weather crops of wheat, barley, gram, mattar (*Vicia*), lentils, tobacco, linseed, sarshaf or sarson, rai, etc. The kharif sowings are jawar, bajra (millet), maize, rice, moth, mung, maah, and other pulses, sugar-cane, and cotton.—*Powell, Handbook*.

HARIALI GRASS, *Cynodon dactylon*. All its stems which lie near the ground take root, and by this means, though an annual plant, it increases and spreads very wide. It yields abundance of seed, of which small birds are very fond. It has been found very successful to allow the seed to ripen before the hay is cut, as it then propagates itself by seeds, in addition to the runners. This grass is also found in Great Britain, but in that country its produce and nutritive properties are comparatively insignificant, while here it constitutes three-fourths of the pasture. It is the most nutritious grass, indigenous to all parts of India, and, when cultivated, of most luxuriant growth in the hottest time of the year.

HARIANA, a municipal town in Hoshiarpur district, Panjab, lat. 31° 38' 15" N., long. 75° 54' E.; pop. (1868), 7745. The Hariana tract of country is in the Hissar and Rohtak districts, Panjab. It consists of a level upland plain, interspersed with patches of sandy soil, and largely overgrown with brushwood. The Western Jumna

canal now fertilizes a large number of its villages. During the troublous period which followed the decline of the Moghul empire, Haryana formed the battle-field where the Mahatta, the Bhatti, and the Sikh met to settle their territorial quarrels. In 1783, the terrible famine known as the San Chalisa devastated almost the whole surrounding country, which lay waste for several years. In 1795, George Thomas took possession of Hissar and Hansi. By the close of 1799 he had extended his power as far as Sarsa, and the Sikh chieftains of the Cis-Sutlej States began to fear his dangerous encroachments. In 1801 they combined in requesting General Perron, Sindia's general at Dehli, to attack Thomas; and a force under Bourquien in 1802 drove him out of Haryana into British territory.—*Imp. Gaz.*

HARI CHANDRAGARH, a mountain and hill fortress, about 20 miles S.W. from Ankoie. It is the culminating point of the watershed of the Bhima and Godavery drainage systems, 4700 feet above the sea. The cap or plateau on its summit is about three miles in breadth. There are Jaina or Buddhist caves in its centre, with a vihara of 750 A.D. according to Fergusson, and 1234 A.D. according to Wilson.

HARIDAS, a disciple of Chaitanya. The name is given to the reader or reciter of the Ramayana, and preacher of the Kirtan during the Ram Naomi. The Haridasari of Mysore recite to music songs and tales from the ancient Hindu writings. See Yugbyasa.

HARIGOLU. TEL. A basket boat.

HARIHAR, a town on the right bank of the Tumbudra river, in the Chittuldrug district of Mysore, lat. 14° 30' 50" N., long. 76° 50' 36" E.; pop. (1871), 6401. Written Hurrayhur.

HARI-HARA, or Hari-Hara putra, a name of the Hindu deity Ayenar.

HARI-MARIAH, a sacrifice of a live kid in front of the village god of the Mahrattas.

HARINA and Sorendip, or Serandah, are Raneh and Madagascar.

HARINAGHATTA, the Trinacachha, one of the mouths of the Ganges.

HARINESWARA or Harinessa, a title of Siva.

HARIPORE, about 12 miles from the Ravi on the eastern bank, supposed to be the Sangala of Alexander. It is west of Pakpatan.

HARISOHANDI, a Vaishnava sect of Hindus, amongst the Dom or sweeper race of the Western Provinces of India. The founder was Haris-Ohandra. See Hindu.

HARIS-OHANDRA, the 28th king of the Solar dynasty. He was son of Tri-Sanku, and was celebrated for his piety and justice. There are legends about him in the Aitareya Brahmana, the Mahabharata, the Markandeya Purana, the only intelligible one being in the Aitareya Brahmana, that of his purchasing Suna Sepha to be offered up as a vicarious sacrifice for his son. He was a descendant of Ikshvaku. He is fabled to have had a hundred wives, but no son; and he visited Varuna, offering, if a son were born to him, to sacrifice him to Varuna. A son was born, and named Rohita, and Varuna claimed the sacrifice, but was put off with excuses, until Rohita grew up and began to travel in the forests. There he met a starving rishi, who had three sons, and Rohita offered him 100 cows for one of his sons, to serve as a sacrificial ransom. To this the

rishi and his wife agreed, and the middle son, Suna Sepha, was given, and for another hundred cows was bound to the sacrificial post by Ajigarta, son of Suyavasa; but Suna Sepha prayed to Indra, to Agni, to Savitri, to Visva Deva, to the Aswina, to the Ushas, and the deities released him from Varuna's bond.—*Garrett.*

HARIT, in Hindu mythology, the coursers of the sun, the analogue of the Greek Charites, from the root Ghar, to shine or glisten. The Harita in the Rig Veda are 7 or 10 mares of the sun, typical of his rays.—*Dowson.*

HARIVANS, founder of the Radha Vallabhi sect of Hindus, whose special deity is Rad'ha, the mistress of Krishna.

HARIVANSA, a poem of 16,374 verses, giving the genealogy of Hari or Vishnu. It is in three parts. It is thought to have been written in the S. of India in the time of the Puranas. The Harivansa is a comparatively modern sequel to the Mahabharata.—*Growse*, p. 50; *Dowson.*

HARIWA, named in the cuneiform inscriptions, is the Aria of the Greeks, the Haroyu of the Vendidad, the modern Herat.—*Bunsen*, iii. 481.

HARKARA. HIND., PERS. A messenger.

HARM, ARAB., means sacred, and is applied to the Mahomedan women's apartments, also to women captives and purchased women. The words Harām, unlawful, Hurmat, chastity, Harāmi and Haramzadah, a wicked person or animal, and Maharram, the first month of the Mahomedan year, come from this word. See Haram.

HARMALA RUTA. — ?

Peganum harmala, — ? | Ruta sylvestris, — ?

Harka, CAN. | Viragu, TAM.
Kodar, Harmal, HIND. | Arkalu, TEL.

Grows plentifully at Lahore. The ruins of the old city are covered with this weed and Aesclepias gigantea. Harmal, in Lahore, is looked upon as the plant sacred to the Pariah caste; yet though a Sikh or Hindu would not touch harmal, the seeds are in common use among the natives to fumigate the rooms of the wounded. The natives regard a person suffering from any discharge, as hæmorrhoids, menses, etc., as unclean, and think that the exhalation proceeding from such person may be prejudicial to the wound; therefore it is customary, on the entrance of every stranger, to strew a few grains of harmal upon a charcoal fire. The natives, with the exception of Sikhs and Hindus, use these seeds internally against weakness of sight and retention of urine.—*Honig*, p. 284; *O'Sh.*

HAR-MANDUR, a celebrated Sikh temple at Amritsur. It was destroyed in 1762 by Ahmad Shah.

HARMOZIA. This ancient town, in a bay of the Gulf of Ormuz, was subsequently called Gombroon, but now Bandar Abbas. It is a seaport town in the province of Kirman, in a barren country. It is fortified with double walls. Bussora did not long benefit by the fall of Hormuz, but appears to have been nearly ruined during the reign of Nadir Shah, whose tyranny extended its baneful influence even to this extremity of the Persian empire; so that in 1760 Mr. Plaisted found there nine houses out of ten deserted. In the year 1689 there seems to have been an English factory at Bussora, subordinate to that at Gombroon, and protected by firmans.—*Ouseley's Tr.* i. p. 155; *A Journal from Calcutta to Aleppo*, etc. p. 11, Lond. 1758; *Kinneir's Memoir*, p. 201.

HARMUZI. HIND. A deep red earth.

HARPALIDÆ, a family of insects, found dispersed in nearly all the countries of the globe: they abound more in the arctic than antarctic regions. The following genera are recorded as belonging to India, viz. *Harpalus*, *Platymetopus*, *Selenophorus*, *Cyclosomus*, and many others. Some species of *Ophonus* from Bengal and Poona closely resemble British species.

HARPEGNATHOS SALTATOR, one of a genus of ants of the Peninsula of India, in Malabar and Mysore. It has the name saltator from its making most surprising jumps when alarmed or disturbed. It is very pugnacious, and bites and stings very severely. It makes its nest under ground, generally about the roots of some plant. Its society does not consist of many individuals. It appears to feed on insects, which it often seizes alive.

HARPOCRATES, the ancient Egyptian god Aurora or Day-spring, is often represented seated on the lotus.

HAR-PUJAH. HIND. The worship of the plough on the day which closes the season of ploughing and sowing, usually in Kartik. See *Hal*; *Har*; *Husbandry*.

HARPULLIA IMBRICATA. *Blume.*

Orontyehum imbricatum, *Bl.*, *Rumphia*, iii. 180. *Streptostigma viridiflorum*, *Thoe*.

This tree is common in the western moist forests of the Madras Presidency, from Canara to Cape Comorin, and ascends the mountains to about 3500 feet elevation; it is also found in Ceylon. When covered with its brilliant orange fruit, it is a beautiful sight on the ghats in Malabar and Canara. The tree flowers in the cold season, and ripens its fruit in March and April. The stigma is sometimes not at all twisted.—*Bedd. Fl. Sylv.*

H. cupanioides, *Roxb.*, is a small tree of the hilly parts near Chittagong; it flowers in April, and the fruit ripens in July.—*Roxb. i.* 645.

HARRIER, species of birds of the genus *Circus*.

HARRIS, GENERAL LORD, commanded at the siege and fall of Seringapatam, A.D. 1799.

HARRIS, LORD, grandson of the first Lord Harris, was born in 1810, and was educated at Christ Church, Oxford, where he took his degree in 1831. The first post that he held under Government was that of Lieutenant-Governor of Trinidad, of which island he was afterwards made Governor and Commander-in-Chief. In 1854 he was made Governor of Madras, and he held the post till 1859, when he was succeeded by Sir Charles Trevelyan. He made a re-valuation of the lands in N. and S. Arcot, from which great advantages resulted to the people and to the State. He sent to Northern India all the Madras soldiers, and, dismantling his own presidency of both men and guns, enabled Lord Clyde and Lord Canning to reconquer Northern India.—*Thurlow, Company and the Crown*, pp. 32, 33.

HARKIS, SIR WILLIAM CORNWALLIS, an officer of the Bombay Engineers, who entered the service in 1823, and died at Poona on 9th October 1848. He wrote on *The Wild Sports of Southern Africa*, London 1844; and afterwards went to Shoa as an ambassador, of which mission he published a narrative, named *The Highlands of Ethiopia*, London 1844.

HARSHA DEVA, a king of Kashmir, who reigned A.D. 1118 to 1125, author of the drama called *Ratnavali*, or the Necklace.

HARSHA VARDDHANA was a paramount sovereign of 36 different states, comprising nearly one-half of India in extent, and including all its richest and most fertile provinces. He was defeated by the Chalukya of Kalyani.—*Cunningham, Ancient Geog. of India*, p. 14.

HAR-SULA. Sacrificial pillars are termed *Sura* or *Sula* in Sanskrit, which, conjoined with *Har*, the Indian god of war, would be *Har-sula*. The Rajput warrior invokes *Har* with his trident (*tri-sula*) to help him in battle, while his battle shout is *Mar! mar!—Tod*.

HARTAL. HIND. Yellow sulphuret of arsenic, orpiment. Two varieties occur,—the *hartal-i-wilayiti* and *hartal-warki*, the last so called from its beautiful glittering lamellar texture; varieties of *hartal-i-warki* are called *hartal pili* and *gulabi*.—*Powell*, p. 63.

HARTII. PANJ. A Persian wheel for raising water. See *Irrigation Wells*.

HARTIGHSEA, sp., in Java yields a fruit used as garlic. *Hartighsea spectabilis*, the *Kohekohe*, or New Zealand cedar, is a good timber tree.

HART'S EAR, *Cacalia kleinia*, *Linn.*

Lisan-us-saur, . . . ARAB. | *Yerrimal naku*, . . . TAN.
Gao-zahan, . . . PERS. | *Yennapa nalika*, . . . TEL.

The leaves resemble the tongue of the cow (hence its Asiatic names); the stalks are prickly, and covered with white spots. While fresh, the leaves have a strong smell like hemlock, and are given by native practitioners, in the form of decoction, in rheumatism, syphilis, leprosy, and in all other cases in which sarsaparilla is usually employed by European physicians. It is brought to Bombay from the Persian Gulf, and is procurable throughout India in most native druggists' shops.—*Faulkner*.

HARTSHORN, the *Luh-koh*, *Luh-jung* of the Chinese, in China used medicinally, in the form of powder, as a jelly, and in tincture.

Hartshorn shavings, *Luh-jung-p'ien* and *Luh-koh-shwang* of the Chinese, is used in China in hæmaturia, spermatorrhœa.—*Smith*.

HARUN-ur-RASHID, khalif of Baghdad from A.D. 786 till A.D. 808. He was famed throughout the world for his valour, love of justice, zeal for literature and the arts, and his encouragement of commerce. He placed all public schools under John Mesue, a Nestorian Christian. His household physicians were Manik and Saleh, two Hindu physicians. He is said to have caught the illness of which he died, on his way from Baghdad to Khorasan, whither he was going in order to suppress the revolt of Rafi. At that time the empire of the khalifah was one of the most powerful that ever existed, and extended from the confines of India and Tartary to the Mediterranean, including also all Northern Africa. The reign of *Harun-ur-Rashid* was prosperous and splendid. Although he has been famed for liberality and justice, his bloody cruelties throw an eternal stain on his memory. He died at Taos in Khorasan, after a reign of 22 years. The Daoudputra, the reigning family at Bahawalpur, claim to be descended from *Harun-ur-Rashid*.—*Vambery, Bokhara*, p. 53.

HARUT, in Mahomedan belief, the name of an angel who, together with another named *Marut*, having severely censured mankind before the throne of God, they were sent down to earth in human shape to judge of the temptations to

HARVEST.

which man is subject. They were seduced by women, and committed every sort of iniquity, for which they were suspended by the feet in a well in Babylon, where they are to remain in great torment until the day of judgment.

HARVEST.

Hisal,	ARAB.	Mietitura,	IT.
Moisson,	FR.	Agosto,	SP.
Erute, Herbst,	GER.	Bichun, Hossand,	TURK.
Faal,	HIND.		

In British India there are very generally two harvests in a year,—the summer crop, sown in the spring, being reaped in the end of summer, and known in Northern India as the kharif. The other harvest, known as the rabi, is sown after the autumn, and reaped in early spring. In some localities there are three harvests, known to the Hindus as that of the spring (arit), asu or autumn, and paush or winter. The emperor Akbar introduced into India the harvest, or Fasil, as an era. See Fasil; Rabi.

HARWAHA. HIND. Predial slaves of N. India.

HARWUN. HIND. A pulse equal to rawan.

HASAINZAI, an independent tribe on the N.W. frontier of India. In 1852 the British moved against them, to punish them for the murder of Mr. Carne and Mr. Tapp; and again, in 1868, to punish them for an inroad on British territory at Agror. A force 14,762 strong, with 20 guns, was moved under Major-General Wilde. —*MacGr. N. W. F. I.* pp. 248–268. See Agror.

HASALE or **HUSSULLEERU**, KARN. One of the aboriginal tribes of Mysore, occupying the hill districts of Nagar, woodmen, but serving as agricultural labourers.

HASAN and **Husain**, two sons of Ali by his wife Fatima, daughter of Mahomed. After Ali's death, Hasan and Husain went to reside at Medina. Hasan was poisoned there, A.D. 659, by an emissary of the khalif. The poison was placed in Hasan's way by his wife Zainab. And several years afterwards, on the 10th of the Maharram, A.H. 46, Husain was slain at Kirbala, his eldest son, Zain-ul-Abidin, alone escaping. These events are commemorated in India by the ceremonies of the first ten days of the Maharram. Annually, as this season of mourning returns, the Shiah Mahomedans recite the melancholy story of the deaths of these martyrs.

The deaths of this family, with the assassination of the khalif Omar in the mosque at Jerusalem, caused the great division into the Sunni and the Shiah sects, which continues amongst Mahomedans to the present day throughout all the Mahomedan world. After the death of the third successor of Mahomet, Ali ascended the throne; but after a short reign of six years, during which he had to encounter a serious rebellion headed by Ayesha, he was at last assassinated. For this reason Ali is regarded as a martyr, and the first of the twelve Imams. Of the Shiabs Hasan and Husain, the two sons of Ali and Fatima were grandsons of Mahomet; as boys they had been his darlings, and as men they received much of that warm personal devotion which had been bestowed on the great founder of Islam. Hasan succeeded his father on the throne for a short time, but yielded to the pretensions of a Sunnite khalif. He was afterwards carried off by poison, and was thus in his turn regarded as a martyr, and the second of the twelve Imams.

HASAN GANGA.

Husain and his followers rose in arms to assert his right to the throne of the khalifs. Near the banks of the Euphrates the enemy pressed against him in overpowering numbers. Nearly all his followers were slain, and his child was killed in his arms. He himself was fainting from thirst and fatigue; but when the hour of prayer arrived, he performed his religious duties in the face of the enemy; for there were few, even in that hostile host, who were prepared, under such circumstances, to draw the sword upon the grandson of the prophet. At last, exhausted by thirst, he bent his steps towards the Euphrates; his adversaries now rushed forward to intercept him. Husain, however, had already thrown himself on his breast over the stream, and was beginning to taste the refreshing water, when an arrow pierced his mouth. A confused crowd of warriors now closed around him, and began to assail him with their swords. A long and desperate struggle followed, but he was at last overpowered, and his head was carried away as a trophy. Husain was thus regarded as, if possible, the greatest martyr of the three; and not only is he revered as the third Imam, but his representatives of the nine succeeding generations are revered as the nine Imams who make up the number to twelve. His death, or martyrdom, was followed by a cry of grief wherever men had embraced the faith of Islam; and even in the present day the Shiah Mahomedans are afflicted with the profoundest sorrow throughout the days of the Maharram, and shed tears for their beloved and martyred Imams; it is a melancholy sight.

HASAN ABDAL, a village in the Rawal Pindi district of the Panjab, forming a part of the remarkable group of ancient cities which lie around the site of the ancient Taxila, lat. 33° 48' 56" N., long. 72° 44' 41" E. Hiwen Tsiang in the 7th century visited the tank of the serpent king Elapatra, which has been identified with the spring of Baba Wali, or Panja Sahib. Successive legends of Buddhist, Brahman, Mahomedan, and Sikh origin cluster around this sacred fountain. The shrine of Panja Sahib crowns a precipitous hill, about a mile east of the town; and at the foot stands the holy tank, a small square reservoir of pure water, generally full of fish. It is so called from its being the burial-place of Baba Hasan Abdal, a Sayyid of Sabzwari, in Khorasan, who came to India with Mirza Shah Rukh, son of Timur, and died at Kandahar, and whose tomb is much resorted to by pilgrims. Jahangir, in his memoirs, says: 'To-day I arrived at Baba Hasan Abdal. About a cos east of the town is a waterfall, the water of which rushes down with great rapidity. There is none like it in Kabul, but there are two or three like it in Kashmir. In the middle is a tank, from which the river flows. Raja Man Singh has built here a little villa. There are a great number of fish in the tank, half a yard and a quarter yard long. As the place is so nice, I stayed here for three days, and drank wine with my friends. I also enjoyed fishing. The fishes are caught with peculiar nets, which are difficult to be used. I caught twelve, had pearls strung through their snouts, and set them free.'

HASAN GANGA. In A.D. 1847, four years before the death of Muhammad Taghalaq, Hasan Ganga, an officer of high station in the Dekhan,

headed a successful revolt against his master, and established what was known as the Bahmani dynasty of the Dekhan, fixing his capital at Kulburga. His descendants reigned for thirteen generations, for 174 years, from A.D. 1347 to 1518. He is said to have been an Afghan of low rank, a native of Dehli. He farmed a small spot of land belonging to a Brahman named Ganga, who was in favour with the king; and Hasan, having accidentally found a treasure in his field, he gave it to his landlord. The Brahman, struck with his integrity, advanced his fortunes. Hasan rose to rank in the Dekhan, where he became a leader in the revolt. He had before assumed the name of Ganga, and now added that of Bahmani, by which his dynasty was afterwards distinguished. During the reign of Ala-ud-Din II., in A.D. 1437, dissensions broke out between the native Dekhani and foreign Mahomedan troops, but towards the end of the dynasty the Dekhani troops gained the ascendancy. Yusuf Adal Khan, a Turk, and chief of the foreign troops, retired to his government of Bijapur, where he subsequently (A.D. 1489) took the title of king, and founded the dynasty of Adal Shahi. Nizam-ul-Mulk, the Dekhani chief, being afterwards assassinated by Kasim Barid, a Turk, his son Ahmad set up the dynasty of Nizam Shahi at Ahmadnagpur, in the Dekhan. Kasim Barid was now the master of the court of the Bahmani king, Mahmud II. (A.D. 1482), at Beder; and two other great chiefs became independent, and after a time each took the title of king. These were Kutub-Kuli, a Turkoman from Persia, and Imad-ul-Mulk, descended from a Hindu convert. The former (A.D. 1512) founded the dynasty of Kutub Shahi at Golconda, near Hyderabad, and the latter that of Imad Shahi at Ellichpur, in Berar. Ahmad Barid, son of Kasim, governed for some time under a succession of pageants, but at length assumed the title of king, as the first of the Barid kings of Beder, the Bahmani family being thenceforth no longer mentioned.

A temporary union of the kings of Bijapur, Golconda, and Ahmadnagpur, in 1564, enabled them to subvert the empire of Vijayanagar, and reduce the power of its chief to that of a petty raja.—*Elphinstone's India*, 416, ii. app.; *Briggs, The Nizam; Shahab-ud-Din's Hist. MSS.*

HASAN-ibn-SABBAH, or Hasan-us-Sabbah, was the founder of the sect known as the Assassins. He was brought up at Nishapur, under the then renowned saint, the Imam-ul-Muwakkaf, and had for his schoolmates the Persian freethinking poet, Omar-ul-Khaiyam, and another, afterwards known as Nizam-ul-Mulk, 'Marshal of the Empire,' prime minister to Alp Arslan. The three lads had made a compact that whichever of them attained to rank and fortune should share his advantages with the other two; and when the most successful of the three was established in his position as marshal-minister, the other two claimed fulfilment of the promise made in youth. Omar-ul-Khaiyam asked only for the means of devoting himself to literature and science, and has left a name as the most original poet and the greatest astronomer of his time; Hasan-us-Sabbah asked for and obtained an important political post, but devoted his energies to endeavouring to supplant his schoolfellow and benefactor. Failing in this, he turned rebel, and, collecting round him a band of fanatics, took possession of the fortress

of Alamut, a mountain on the shores of the Caspian, and spread terror through both Islam and Christendom by the fierce bravery with which he and his followers encountered all opposition, and by the terribly insidious manner in which he removed his enemies by secret assassination, Nizam-ul-Mulk being among his many victims. One of the numerous stories told of him is that, having been summoned to surrender, he called two of his followers to him, and bade one to stab himself, and the other to throw himself from the highest battlements of the fortress. This order the 'Devoted Ones'—Fidwi, as they were called—at once obeyed, and Hasan derisively asked the envoy what his master's troops could do against a chief who commanded such men as those. He was pitiless and inscrutable. It is said that he slew his own son because he drank wine. This does not seem to coincide with the belief that his followers were addicted to the use of the resin of *Cannabis Indica*, or Indian hemp, called hashish, whence some have derived their name of Hashishin, the 'Assassin' of European languages. Hasan-us-Sabbah was generally known as 'Shaikh-ul-Jabl' from his mountain fortress; and it is from the title Shaikh, which means both a 'chief' and an 'old man,' that he is known to European history as the 'Old Man of the Mountain.' He gave his name to the Al-Hasani, a heterodox sect, now variously known as the Ismaili, Bathenians, or Assassins, who are spread through Asia from Persia to Western India, and during the crusades he or one of his successors was known as the 'Old Man of the Mountain,' a mis-translation of the Shaikh-ul-Jabl. His career was from A.D. 1090 till his death in A.D. 1124, at Alamut, where he had lived 35 years. The political power of the sect was destroyed by Hulaku, grandson of Chengiz Khan, A.H. 654.—*Porter's Travels*, i. 286; *Osborne's Islam*, p. 357.

HASAN KHEL, (1) A section of the Gadai-zai Bunerwal; (2) of the Adam Khel Afridi; (3) of the Mahmud Khel Utmanzai Vaziri.—*MacGr. N.W. F. I.* i. p. 578.

HASAN NIZAMI, author of the *Taj-ul-Maasar*, or *Crown of Victories*, was born at Naishapur. Mir Khoud and Haji Khalfa call him Sadr-ud-Din Mahomed-bin-Hasan Nizami. He left his home during the troubles that overtook it, and went to Ghazni, and on to Dehli. His book gives the history of Kutub-ud-Din Aibek, with portions of the life of his predecessor, Muhammad Ghazi, and of his successor, Shams-ud-Din Altamsh.—*H. Elliot*.

HASHIM-bin-HAKIM, born at Gaza, near Merv, is known as Mokanna, or the Veiled Prophet of Khorasan, because he was one-eyed, deformed in feature, and bald, and concealed his features. He claimed to be the deity; his most numerous converts were near Samarcand and Bokhara. He was joined by hordes from Turkestan. He had a hundred of the loveliest women of Transoxiana. About the year 163 Hijra, he destroyed himself.

HASHIYA. HIND. A border or edging.

HASHM. ARAB. Train, retinue. Pl. Ahaham.

HASHMEE MAUND, equal to 16 Tabreez maunds of 7½ lbs. each, or about 116 lbs. English.

HASHT-ANGA. SANSK. Literally, eight limbs. A reverential prostration of the Hindus, in which they touch the ground with the belly, breast, forehead, and both sides of the face successively,

kiss the earth, half rise up, then pass the left over the right forearm, and *vice versa*; and finally, after again saluting mother Hertha, stand erect.

HASHTNAGAR ('Eight Cities'), a Tahsil of the Peshawur district, Panjab; lat. $34^{\circ} 3'$ to $34^{\circ} 25' N.$, and long. $71^{\circ} 37'$ to $71^{\circ} 57' E.$ General Cunningham believes the modern term to be a corruption of Hastinagara, the city of Hasti.

Hasti, Tod says, sent forth three grand branches, Ujamida, Deomida, and Poormida. Ujamida's progeny spread over all the northern parts of India, in the Panjab, and across the Indus; the period, probably 1600 years before Christ. From Ujamida, in the fourth generation, was Bajaswa, who obtained possessions towards the Indus, and whose five sons gave their name, Panchalica, to the Panjab, or space watered by the five rivers. The capital founded by the younger brother, Kampila, was named Kampilnagara. The descendants of Ujamida by his second wife, Kesunee, founded the Kusika kingdom and dynasty, celebrated in the heroic history of N. India.—*Tod*.

HASHU or Hashwi occupy the watershed between the Thoukye Khat and POUNG-LOUNG.

HASISH. ARAB. Tender tops of Cannabis sativa, after flowering, the Bhang of India and Persia, and Fasukh of Barbary. It is indulged in to some extent by Mahomedans of India. Egypt surpasses all other nations in the variety of compounds into which this drug enters. The Hottentots use it; and the Siberians intoxicate themselves with the vapour of the seed thrown upon red-hot stones, as the Scythians of old did.

HASORA, a town in Central Asia, 7198 feet above the sea, on the banks of the river which runs northwards to the Indus. The Hasora country is west of Deotsu, and lies to the south of Rongdo. The people speak the Tibetan language. Moorcroft gives it the name of Zungari. It is partially a Bhot district. According to Ad. Schlagentweit, Hasora, or Astor, or Tsunger, in lat. $35^{\circ} 12' N.$, and long. $74^{\circ} 53' E.$, is a fort in the valley of Astor or Hasora.—*Moorcroft*; *Ad. Schl.*; *Latham*.

HASSAN, a mountain forming part of Taurus and Zagros, between Diarbakar, Palo, and Moosh. The Kurd race, who inhabit all that part, are called Zaza, which means stuttering, mouthing, or speaking unintelligibly, and seems to be a nickname.—*Rich's Kurdistan*, i. p. 376.

HASSAN, a district of Mysore State, forming the north-western portion of the Ashtagram division, and lying between lat. $12^{\circ} 30'$ and $13^{\circ} 22' N.$, and between long. $75^{\circ} 32'$ and $76^{\circ} 58' E.$ The Jains have been numerous at Sravan-Belgola and other places since the 3d century B.C.; and a Jaina image of Gomateswara, 60 feet high, is on a peak of Chandrabetta. The census of 1871 ascertained the population to be 669,961. Of inferior castes, by far the most numerous are the Wakkiga (238,780), who are agricultural labourers; next come the Kuruba (55,341), shepherds; and the Neyige (15,972), weavers. The Lingaets, who have always been influential in this part of the country, number 70,168. Out-castes are returned at 128,913; wandering tribes, 5109; wild tribes, 3602. The village of Sathalli is the centre of an agricultural Christian community, founded by the Abbé Dubois. The total number of this community is about 1000, and they are known as 'Caste Christianus,'—that is to say, they retain all

the social observances of their Hindu ancestors. The Malnad is greatly dreaded for the malarious fever which prevails after the early rains.—*Imp. Gaz.*

HASSANDHUP. HIND. A hard, white clay, supposed to be a deposit from a mineral spring containing sulphur. But it is also a medicinal compound.

HASSANIYEH, an Arab tribe, who have a very curious form of marriage. The woman is legally married for three days out of four, remaining perfectly free for the fourth.—*Lubbock, Orig. of Civil*, p. 54.

HASSETIA ABOREA, a handsome tree growing near Jampian, in Java, with flowers large, yellowish-white, in axillary fascicles. The milk obtained from the trunk by incision, mixed with honey and reduced with boiling water, is employed as a powerful drastic for destroying the tape-worm; it is, however, apt to produce inflammation of the intestines, and in some cases has proved fatal.—*Lindley, Flora Medica, Eng. Cyc.*

HASKARL, JUSTUS CHARLES, a botanist, Superintendent of the Gardens at Java, 1852–1854. Collected cinchona plants and seeds in South America, and took them to Java. He was created Knight of the Netherlands Lion, and Commander of the Order of the Oaken Crown. He was author of the Hortus Bogoriensis, a catalogue, with occasional notes and descriptions, of new species of the plants cultivated in the Government Botanical Garden of Buitenzorg, near Batavia, published in Batavia in 1844; also author of an octavo volume of descriptions, entitled *Plantæ Javanicæ Rariores*.—*Hooker f. et Thomson*; *Markham, Peruv. Bark*.

HASTINAPUR, an ancient city of the Meerut district, N.W. Provinces, lying on the bank of the Burha Ganga, or former bed of the Ganges, 22 miles north-east of Meerut, lat. $29^{\circ} 9' N.$, and long. $78^{\circ} 3' E.$; pop. (1872) 77. Its remains can still be traced on the banks of the river, but it was destroyed by the river encroaching on it. Hastinapur formed the capital of the great Pandava kingdom, celebrated in the Mahabharata. The legends of the Mahabharata centre around this city.

HASTINGS, FRANCIS, second Earl of Moira, afterwards created Marquess of Hastings, G.C.B., assumed charge of the office of Governor-General of India, 4th October 1813, and held it till his re-embarkation, 9th January 1823. During his tenure of office, he took the field in person, on the 18th October 1817, against the Pindara. The forces under his command in the field were over 100,000 horse and foot, besides 20,000 irregular cavalry. He allotted several positions to the brigades, and closed in upon the Pindara. One leader, Karim Khan, fell into the hands of Sir John Malcolm; another, Sita or Chetu, was killed by a tiger, whilst sheltered in the forests near Asirgarh. While the Governor-General was encamped in the part of the country formerly ruled by a noted chief, Lalla Hurdi, cholera broke out in the camp, and in ten days carried off 764 fighting men and 8000 camp-followers. He broke up his camp, and marched S.E. from the Sind across to the right bank of the Betwa, and encamped at Erich, where the cholera disappeared. The natives of India attributed that outbreak to the malignity of Lalla

Hurdi's ghost, who had been poisoned under extraordinary circumstances. The Marquess induced the Government of Great Britain to extend the Order of the Bath to officers of the E.I. Company's service, and before the conclusion of the third Mahratta war fifteen of them were created Knights Commander. He invested the first of these, Sir David Ochterlony, on the 20th March 1818, at Terwah. The E.I. Company acknowledged their sense of his services, bestowing on his family two grants of money, in sums of £60,000 and £20,000 respectively. His long rule of 9 years, from 1814 to 1823, was marked by two wars of the first magnitude, namely, the campaigns against the Gurkas of Nepal, and the last Mahratta struggle.

HASTINGS, WARREN, the first Governor-General of India. He was born in 1732, and came to India as a writer in 1749. He returned to England in 1763; but in 1769 he was appointed to be 2d Member of Council at Madras, in 1772 President of Council, Bengal, and in 1773 Governor-General, and on the 1st February 1785 he made over the keys of the fort to the next senior Member of Council, and left India on the 6th of the same month. He carried with him a modest fortune of £80,000. On his arrival in England in 1785, he was well received by the King, Queen, and Court of Directors, and was about to be made a peer, when Mr. Pitt opposed this, and, seven days after his arrival, he was impeached by Messrs. Burke, Fox, and Sheridan, accused of acts of oppression. His trial commenced on the 13th or 15th February 1788, in the presence of the King and Queen. It proceeded for seven years, and at length, after an honourable defence, on the 23d April 1795 Hastings was acquitted; the verdict of an impartial posterity has long since affirmed the award (Marshman, i. p. 427). He passed out at the gate of Westminster Hall ignorant whence the funds were to come by which the weekly bills of his household were to be discharged; but the Court of Directors paid his costs, and granted him an annuity. From all parts of the empire, from men of various creeds and colours, from officers of renown, from Hindus and Mahomedans alike, poured in addresses of congratulation. The Prince Regent made him a Privy Councillor, and hinted at higher honours. Happy in his family life, blest with the healthy old age which is the appropriate reward of a pure and temperate manhood, farming and writing little poems, studying Malthus, and following with delight the rising genius of Walter Scott, the great proconsul glided by an easy road into euthanasia and immortality. He died on the 22d August 1818, in his 86th year; in which year also Sir Philip Francis, his opponent, died. He was the administrative organizer, as Clive had been the territorial founder, of the British Indian Empire. He rested his claims as an Indian ruler on his administrative work. He re-organized the Indian service, reformed every branch of the revenue collections, created courts of justice, and some semblance of a police. In 1781 he founded the Madrasa for Mahomedan teaching, and he extended his patronage alike to Hindu pundits and to European students.—*Imp. Gaz.* iv.

HASYARNAVA. SANSK. Ocean of Laughter, a modern comic piece, by a pundit named Jagadisa.—*Douson.*

HAT. HIND. A periodical market day, a fair.

HATA or Saif is a long gauntleted weapon used in athletic exhibitions.

HATCHING FOWLS' EGGS by artificial heat, though only obscurely described by ancient authors, appears to have been common in Egypt in very remote times. The building in which the process is now performed is called Maamal-el-Tirakh. In Chusan the hatching-house of ducks is a shed, the roof thickly and compactly thatched with paddy, the walls plastered over with mud. There are a number of straw baskets, thickly besmeared with mud to prevent them from igniting; a tile is so placed as to form the bottom of the basket, and a lid fits closely over the top. A small earthen fire-pot being placed under each basket, the eggs belonging to different folks are put into the baskets as soon as they arrive. The baskets are kept closely shut for five days, a uniform heat being maintained under the basket by means of the before-named earthen fire-pot, and at the expiration of that period they are taken out and carefully examined; the good are placed in holes, which have been cut in a board for their reception, and the bad are laid aside to be returned to their owners. Before the eggs have become cold, they are replaced in the baskets and kept there for nine or ten days; that is, the eggs remain altogether in the baskets about a fortnight or fifteen days, the heat of the hatching-house ranging from 93° to 100°. In the middle of the shed broad shelves are placed, on which the eggs are laid when taken finally from the baskets, being carefully covered over with a thickly wadded coverlet, and the little birds issue from their fragile domicile in about a fortnight or three weeks,—the whole process of hatching an egg occupying one month or five weeks. In the Philippines incubation is performed by placing warm paddy husks under and over the eggs, which are deposited in frames. A canvas covering is spread over the husks. The art is to keep up the needful temperature; and one man is sufficient to the care of a large number of frames, from which he releases the ducklings as they are hatched, and conveys them in little flocks to the water-side.—*Poocke's East*, i. 260; *Bowring's Philippines*, 104; *Sirr's Chinese*, i. 249.

HATHIKRA-GHILLI. HIND. An earthenware pestle, weighted, used for crushing gram.

HATHIL, a reputed saint, one of five held in veneration by the lower orders in the N.W. Provinces. He is buried at Bareilly.

HATHPHOR, a tunnel on the northern face of Rangarh Hill, Sirguja State, Chutia Nagpur. At its mouth it is about 20 feet in height by 30 in breadth, but at the inner extremity of its course of 150 yards it is not more than 8 feet by 12. On the southern side of the recess rises a sandstone cliff, which contains two caves, the larger being 44 feet long, 10 feet wide, and about 6 feet high. It was here, according to the legend, that Sita was carried off by the demon Ravana; and two deep grooves in the rock, in front of the larger cave, are said to be portions of the enchanted circle which Rana drew around her for her protection.—*Imp. Gaz.*

HATIM TAI, an Arab chief, famed amongst Mahomedans for his generosity. Many Persian and Hindustani romances have been written regarding him. He lived about a century before Mahomed. In all Mahomedan countries he is quoted as a model of generosity. Al Maida says, when he

fought, it was to be triumphant; when he had acquired spoils, he gave to the spoiled; when he besought, he gave; if he contested with the powerful, it was to overcome; when he took captives, he released them.—*Major J. Daklon*, p. 162; *Palgrave*.

HATKAR, a cowerd race of Berar.

HATRAS, formerly highly predatory, under British rule became one of the busiest and most thriving places in Upper Hindustan, and a principal mart for the cotton and indigo of the neighbouring districts.—*Tr. of Hind.* ii. p. 122.

HAUDA. **HIND.** The howdah or chair for riding on an elephant. It is in various forms. The Hauda-amari is a howdah with a canopy.

HAUDIGA. **CAN.**? A Mysore wood used for furniture; polishes and turns well; is useful for the cabinetmaker, and would do for veneering.

HAUG. Martin Haug, Doctor of Philosophy, in early life assisted Chevalier Bunsen in preparing his *Bibelwerk*. He was afterwards appointed Professor of Sanskrit at Poona, an office which he held from 1859 to 1865, and during this time he devoted himself to the study of the Zend. He published his *Fünf Gatha* in the *Journal of the German Oriental Society*. In Bombay there appeared his essays on the Sacred Language, Writings, and Religion of the Parsees; and he also edited a translation of the *Aitareya Brahmana*. He returned to Germany in the beginning of 1866, and was almost immediately afterwards appointed Professor of Sanskrit and Comparative Philology in the University of Munich, which he held up to the time of his death. He and dastoor Hoshang Jamasp published two valuable glossaries of the Old Zend-Pehlavi, and an edition and translation of the *Arda-Visaf*. He died in Switzerland, 2d June 1876.

HAUL. **ARAB.** Power. *La haul wa la quwat ila ha Allah*, There is no power nor virtue but in God,—a solemn invocation of Mahomedans.

HAURAN is a term applied to any solitude, whether barren or fertile, and sometimes applied to extensive pasture lands. Hauran is the Auranitis of Josephus, and the Iturea of St. Luke. The countries south of Damascus, viz. the Hauran, the rocky wilderness of the Ledja, and the mountainous district lying east of the Jordan, collectively speaking, formed the country which was first conquered by the Israelites before the subjugation of the land of Canaan, and was allotted to the tribe of Reuben, Gad, and the half tribe of Manasseh. In the time of the Romans, nearly the whole was comprised under the district called *Peræa*, which was itself divided into the six cantons of Abilene, Trachonitis, Iturea, Gaulonitis, Batanæa, and *Peræa*, strictly called; to which some geographers have added Decapolis. Abilene was the most northern of these provinces, being situated between the mountains of Libanus and Anti-Libanus, and deriving its name from the city of Abila or Abela. Trachonitis was bounded by the desert on the east, Batanæa on the west, Iturea on the south, and the country of Damascus on the north, and included the rocky district now called El Ledja. Iturea, on the east of Batanæa, and to the south of Trachonitis, derived its name from Ietur, the son of Ishmael, and was called Auranitis, from the city of Auran, which latter appellation it still retains, under that of Hauran. Gaulonitis was a tract on the east side of the lake

of Gennesareth and the river Jordan, which derived its name from Gaulan, the city of Og, king of Bashan. Batanæa, the ancient kingdom of Bashan, was situated to the north-east of Gaulonitis, and was celebrated for its excellent breed of cattle, its rich pastures, and for its stately oaks. A part of it is now called El Belka. *Peræa*, in its strictest sense, included the southern part of the country beyond Jordan and Samaria.

In May the whole of the Hauran plain is covered with swarms of Bedouin wanderers from the desert, who come for water and pasturage during the summer months, and to obtain a provision of corn for the winter; they remain till after September. If they are at peace with the pasha, they encamp generally amongst the villages near the springs or wells; if at war with him, confine themselves to the district to the south of Boazra, towards Om-e-jaml and Jadheins, extending as far as Zerka. The Arabs of the Jabl Hauran (called the Ahl-ul-Jabl) and those of the Ledja seldom encamp beyond their usual limits; they are kept in more strict dependence on the pasha than the other tribes. The Ahl-ul-Jabl are the shepherds of the people of the plains, who entrust them with their flocks during the winter to pasture amongst the rocks and mountains. In spring the Arabs restore the flocks to their proprietors, receiving for their trouble one-fourth of the lambs and kids, and a like proportion of the butter made from the milk during the spring months. Those which are to be sold are taken to Damascus. The soil of the Hauran consists of a fine black earth, of great depth, but little cultivated.—*Burckhardt; Robinson's Travels*.

HAUZ. **ARAB.** **HIND.** A fountain, a tank.

HAVELOCK, SIR HENRY, K.C.B., one of three brothers, officers in the British army, who served in India. William was killed in charging the Sikhs at Ramnuggur. Henry, born 1795 at Bishopwearmouth, in 1815 entered the army in the 95th Regiment, and afterwards exchanged into the 13th Light Infantry, and in January 1823 embarked for India. He served in the first Burmese war as Deputy Adjutant-General, and published his *Experiences of Campaigns in Ava*. On the 9th February 1829 he married Hannah Shepherd, youngest daughter of the Rev. Dr. Marshman. He was with his regiment whilst it was cooped up in Jalalabad. He was present at the battles of Punniur and Maharajpur. In 1857 he commanded a division in the Persian war. When the mutiny and rebellion of 1857 occurred, Havelock suggested the formation of a moveable column at Allahabad, which was immediately formed, and among the troops were Neill's Madras Fusiliers. From this time he commanded in many battles,—on the 11th July 1857, at Futtchpur; on the 15th he fought at Aong; on the 16th he fought and took Cawnpur. His last great effort was the first relief of Lucknow, on the 25th September 1857. The second relief of Lucknow was effected by Sir Colin Campbell, on the 17th November 1857. Sir Colin Campbell had arrived in India, and the Government had superseded Havelock, putting Outram in command of the force in Oudh; but that noble soldier refused to supplant his brave comrade, preferring rather to act under him than deprive him of his well-earned right to relieve Lucknow, and the two together advancing

effected the relief. The Blue Caps (Fusiliers) charged the Char Bagh bridge, but Maude's two guns could not silence the superior artillery of the enemy in their front. Almost every man at them was either killed or wounded, when General Neill, who commanded the first brigade in Sir James Outram's absence, allowed a charge, and the first Madras Fusiliers were ordered to advance. Lieutenant Arnold, a young officer ever conspicuous even among the daring spirits of that noble regiment, had been impatiently watching for the signal. At the first word, and without waiting for the regiment to rise and form, he dashed on to the bridge with some ten of his men. Arnold himself fell, shot through both legs, and his devoted followers were swept down almost to a man. Lieutenant Havelock, the Deputy Assistant Adjutant-General, alone remained on the bridge, the mark for a hundred bullets. The Fusiliers dashed forward with a cheer, without giving the enemy time to reload, advanced over the prostrate bodies of their comrades, and, rushing on the guns amidst a storm of bullets, wrested them from the enemy, and bayoneted the gunners. It was a second Lodi! Poor Arnold died. 'At length,' writes the general, 'we found ourselves at the gates of the Residency, and entered in the dark in triumph.' General Havelock's career was finished. He fell sick, and died in perfect peace and hope, attended by his aide-de-camp, Hargood of the Fusiliers, and his son. Calling the latter to him, he said, 'I die happy and contented.' 'See how a Christian can die.' And when Outram came to visit his dying comrade, he said, 'I have forty years so ruled my life, that when death came I might face it without fear.' A statue has been erected to his memory in Trafalgar Square, London.

HAVILDAR, in the British Indian armies, a non-commissioned officer of native soldiers equal to a sergeant.

HAVVAH or Hawa of the Arabs, the Eve of the Bible, the mother of the human race, and recognised under different names in all cosmogonies. The Astarte of the Assyrians, Isis nursing Horus of the Egyptians, the Demeter and the Aphrodite of the Greeks, and the Scythian Frija. Baltis, in Byblius called Benth or Behuth, i.e. void of genesis, is identical with space, and means the mother's womb, the primeval mother,—the fundamental idea being the mother or source of life, which is the meaning of Havvah, and the Eve of Genesis. The tomb of Eve is pointed out in several places. Mecca is bounded on the east by a hill called Abu-Kubays, and, according to many Mahomedans, Adam, with Eve his wife and son Seth, lie buried there. Also, at less than a mile from the Medina gate of Jedda, is a tomb said to be of our common mother Eve. It is surmounted by a cupola and surrounded by walls, enclosing a pretty cemetery, in which many of her children lie around her.—*Bunsen's Egypt; Hamilton, Sinai.*

HAWAIGAR, in Hindustan, firework manufacturers.

HAWK EAGLE, species of the genera *Nisætus* and *Linnæus*.

HAWKING is a pastime to which several Asiatic races are addicted. The employment of trained hawks may be traced to an exceedingly remote antiquity; and Mr. Layard found a bas-relief at Khorsabad, in which a falconer is bearing a hawk on his wrist. The Bedouins of Mesopotamia

are attached to the sport, and especially so with reference to their food supply; and the Arabs may possibly have introduced it, together with the creed of Mahomed, among the Malays of the Archipelago. In Africa this sport is confined to a few of the Mahomedans of the north. In Europe it seems to be first distinctly mentioned by authors about the fifth century; but the garniture of the trained hawks would appear to have been unknown prior to the crusades. In the famous Bayeux tapestry, for instance, falcons are represented as carried upon the wrist unhooded. Trained ospreys were formerly employed in Europe for fishing; and Colonel Montague cites an Act passed in the reign of William and Mary, by which persons were prohibited at a certain period of the year from taking any salmon, salmon peal, or salmon kind, by hawks, racks, guns, etc. There is at least one great hawk fair or sale in the Himalaya, at which Indian falconers, many of whom come from immense distances, congregate for the purpose of buying, selling, and comparing their hawks.

The hawks commonly used are—

1. *Goshawk*.—*Astur palumbarius*, Linn. Baz, Shah-baz, female; Jurra, male. Europe, Himalaya, Sind, Neilgherries.
2. *Crested Goshawk*.—*A. trivirgatus*, Temm. Gorbura, Manik-berra, Kot-eswar. All the hilly wooded regions of India.

The Shah-baz, or hawk-king, a large grey goshawk with yellow (gulab) eyes, caught in the hills of Afghanistan and its surrounding regions, is brought down to the plains, and sold, when well reclaimed, trained, and in good condition, for £5 or £6. The tiercelet or male is, as usual, much smaller than the female, and is called Jurra in Persian, 'the active.' Both are uncommonly strong and ferocious. They are accounted the noblest birds; the Sher-baz (lion-hawk), or peregrine of Bokhara and the snowy regions, being all but unknown in Sind.

3. *Peregrine Falcon*.—*Falco peregrinus*, Gm. Bhyri, female; Bhyri bacha, male. Native of Europe, N. Asia; visits India from October to April.

The Bhyri or Bhairi, *Falco peregrinus*, so celebrated amongst Indian falconers for her boldness and power, and her tiercel, in Sind improperly called the Shahin, are found in some parts of Sind. They fly at partridges, hares, bustards, curlews, herons, and the saras; being long-winged hawks, or birds of the lure, they are taught to fly high, to wait on the falconer, and to make the point; not greatly prized.

4. *Laggar*.—*Falco jugger*, Gray. Laggar, female; Jaggar, male. Common over all India, Sind, Panjab.

The Laggar, and her mate the Jaggar, is the only long-winged hawk generally used in Sind; she is large and black-eyed, with yellow legs, black claws, and a tail of a cinereous white colour. She is a native of Sind, moults during the hot months from April to October, and builds in ruined walls and old minosa trees. The Laggar is flown at quail, partridge, curlew, bastard-bustard, and hares. The best sport is undoubtedly afforded by crows, only she is addicted to carrying the quarry, and is very likely to be killed by her angry enemies. She is trained for the season, and then let loose.

5. *Shahin Falcon*.—*Falco peregrinator*, Sund. Shahin, female; Kohi, Koela, male. Native of all India, Afghanistan, and Western Asia.

HAWKINS.

The Shahn is the female of the *Falco peregrinator*, and is esteemed the first of all the falcons for hawking. It is trained to hover and circle in the air over the falconer and party.

6. *Saker or Cherrug*.—*Falco sacer*, *Schl.* Charrh, female; Charghela, male. Africa, Himalaya, Nepal, Europe.

The Saker or cherrug falcon, *F. sacer*, is trained for striking hares, antelopes, florikin.

7. *The Merlin*.—*Hypotriorchis cesalon*, *Gm.*

8. *Turumti, or Redheaded Merlin*.—*H. chicquera*, *Daud.* Turumti, female; Chetwa, male. Europe, all India, and Sind.

Both these have been trained in Europe and Asia.

9. *The Hobby*.—*Hypotriorchis subbuteo*, *L.* Doreli, Regi. Native of Europe; a winter visitor to all parts of India.
10. *Indian Hobby*.—*H. severus*, *Horsf.* Dhuti, female; Dhuter, male. Inhabits the Himalaya, Malay Peninsula, Java, and the Philippines.
11. *The Kestrel*.—*Tinnunculus alaudarius*, *Briss.* Narzi, female; Narzanak, male. A native of Europe; a cold-weather visitor to India.
12. *Lesser Kestrel*.—*Erythropus cecchris*, *Naum.* Kashmir, Neilgherries.
13. *Red-legged Falcon*.—*E. vespertinus*, *L.* S. Europe, N. Africa, Western and Central Asia, India.
14. *Shikra*.—*Micronisus badius*, *Gm.* Shikra, female; Chipka, Chipak, male. Afghanistan, all India, Ceylon, Assam, Burma, Malaya.
15. *European Sparrow-hawk*.—*Accipiter nisus*, *L.* Bashla, female; Bashin, male. Visits India, October to March.
16. *Besra Sparrow-hawk*.—*A. virgatus*, *Temm.* Besra, female; Dhuti, male. All the large forests of India, Assam, Burma, and Archipelago.

The Shikra and her tiercel the Chipak are flown at partridges, and by their swiftness and agility afford tolerable sport. At the same time they are opprobriously called dog-birds by the falconer, on account of their ignoble qualities, their want of stanchness, and their habit of carrying the game,—carrying being the technical word for flying away with the wounded bird. They could formerly be bought ready trained in most parts of Sind for a shilling or two.

The Shikra, *Micronisus badius*, is more commonly trained in India than any other hawk.

The European sparrow-hawk, *Accipiter nisus*, and the Besra sparrow-hawk, *A. virgatus*, are both largely trained.

The Bashah sparrow-hawk, *A. nisus*, and her mate the Bashin, a small, short-winged, low-flying bird with yellow eyes, and dark plumage in her first year, which afterwards changes to a light ash colour, marked with large grey bars, are very much valued on account of the rapid way in which they fill the pot, especially with partridges. As they remain in Sind during the cold weather, and retire in summer to the hills around, those trained are passage-hawks, or birds of the year. Their low price, 8s. or 10s., made it scarcely worth while to mew them, so they were let loose when the moulting season commenced.—*Jerdon's Birds; Burton's Falconry in the Valley of the Indus.*

HAWKINS, an English captain who landed at Surat in the year 1608, in the reign of the emperor Jahangir. He proceeded to Agra to the court of the emperor, where he was well received.

HAWKS, Kites, etc.

Falcon.	FR.	Halcon.	SP.
Habicht, Falke.	GER.	Atmaja,	TURK.
Falcoone,	IT.		

HAWKS.

Eagles, hawks, kites, etc., are all classed by naturalists under the sub-families *Accipitrinæ* or hawks, *Aquilinæ* or eagles, *Buteoninæ* or buzzards, *Falconinæ* or falcons, and *Milvinæ* or kites, etc., all of the family *Falconidæ*. They fly well, take their prey on the wing, feed on small mammals, birds, reptiles, fishes, and insects; almost all are solitary and monogamous. Many of them are common to Great Britain and the E. Indies, as the peregrine and other falcons, the merlins, and kestrel. *Astur trivirgatus*, the goshawk, occurs in the hilly parts of Nepal, India, and the Malay countries. *A. palumbarius* is a native of Europe and the Sub-Himalaya. The kestrel is occasionally observed in extraordinary abundance, and harriers (*Circus*) are often seen beating over the open ground. In Lower Bengal, kites quit Calcutta and neighbourhood during the rains and return in the cold weather. It is supposed that they go to the N.E. to breed. The kestrel, baza, and Indian hobby are most frequent in Bengal during the rains. In Bengal, the kites and Brahmany kites breed chiefly in January and February, and disappear during the rains; but adjutants appear as soon as the rains set in, and, becoming in fine plumage towards the close of the rains, depart at that time to breed in the eastern portion of the Sunderbuns, and along the eastern coast of the Bay of Bengal, upon lofty trees and rocks. In the island of Bombay, on the approach of the monsoon, nearly all the kites, hawks, vultures, and other carrion birds disappear from the sea-coast; but the crows begin to build their nests and hatch their young just at the season that seems most unsuitable for incubation, when the eggs are often shaken out, or the nests themselves are destroyed, by the violence and inclemency of rain and tempest. Carnivorous birds, as the rains approach, betake themselves to the comparatively dry air of the Dekhan, where they nestle and bring forth in comfort, and find food and shelter for their little ones. The scenes which follow the conclusion of the rains are curious enough. While the Mahomedans bury, and the Hindus burn their dead, the Parsee race expose their dead in large cylindrical roofless structures, called towers of silence, where birds of prey at all times find an abundant repast. Their family cares and anxieties over for the season, the carrion birds, which had left in May for the Dekhan, return in October to Bombay, and make at once for the usual scenes, now stored with a three months' supply of untasted food. As they appear in clouds approaching from the mainland, the crows, unwilling that their dominions should be invaded, hasten in flocks to meet them, and a battle ensues in the air, loud, fierce, and noisy; the fluttering of the wings, the screaming and cawing of the combatants, resounding over the island, till the larger birds succeed, and, having gained the victory, are suffered henceforth to live in peace.

In Ceylon, the beautiful peregrine falcon, *Falco peregrinus*, *Linn.*, is rare, but the kestrel, *Tinnunculus alaudarius*, *Briss.*, is everywhere found; and the bold and daring goshawk, *Astur trivirgatus*, *Temm.*, is seen wherever wild crags and precipices afford safe breeding places. In the district of Anaradhpura, where it is trained for hawking, it is usual, in lieu of a hood, to darken its eyes by means of a silken thread passed through holes in the eyelids. The ignoble birds of prey the kites,

Milvus govinda, *Sykes*, keep close by the shore, and hover round the returning boats of the fishermen, to feast on the fry rejected from their nets. *Accipiter trinitatus* is a beautiful hawk of Celebes, with elegant rows of large round white spots on the tail.—*Tennant's Ceylon*, p. 246; *Dr. Buist in Bombay Times*; *Mr. Blyth, 'Z.'* in *Indian Field*. See Eagles.

HAY.

Hovi,	DUT.	Feno,	PORT.
Foin,	FR.	Syeno,	RUS.
Haw,	GER.	Heno,	SP.
Ghans,	GUJ.	Hd,	SW., DAN.
Sukha ghans,	HIND.	Wolanda pillu,	TAM.
Fieno,	IT.	Endu pachika,	TUR.
Fonum,	LAT.	Kuru ot,	TEL.

Any kind of grass cut and dried for the food of horses, cattle, etc.—*M'Culloch*; *Faulkner*.

HAY, LORD ARTHUR, afterwards Marquess of Tweeddale, author of numerous contributions on the botany and natural history of India.

HAYOBANS, a Rajput tribe in the province of Benares, who once were dominant on the banks of the Nerbadda.—*W.*

HAYWARD, GEORGE W., a scientific explorer, who was endeavouring to reach the Pamir steppes and the country north of Peshawur, in the interest of the Royal Geographical Society of London, but was murdered, in A.D. 1870, in Chitral by Mir Wali, the nephew (sister's son) of Aman Malik, chief of Chitral, the valley north of Swat and Bajour and west of Gilghit. The Kashmir authorities urged him repeatedly to abandon the expedition, in which his life would not be safe. Mr. Hayward resolved to persevere, although he was aware that beyond the Gilghit frontier the Maharaja of Kashmir would be absolutely unable to protect him.

HAZAR. ARAB. Present. Hence also Hüzür, the presence, an appellation of royalty; also Hazrat, a respectful address; Hazari, breakfast.

HAZARA, according to Bellew, is from Hüzür, a thousand; it means a division, a disposition by thousands, and is so applied by the Persians, by the mountaineers of Ghor, and by the Afghans, to the Mongol tribes occupying the mountain country of Ghor, lying between Kabul and Herat in one direction, and Kandahar and Balkh in another. He says (p. 205) it is the equivalent of the Tartar toman or tuman. Hazara tribes occupy the whole range of the Paropamisus, or the mountains extending between the Hindu Kush or Caucasus and the city of Herat, to within a few days' march of Kandahar. The Hazara districts between Kabul and Bamian are collectively called Bisut, and mallia or tribute is enforced from them by the authorities of Kabul. In the mountainous country between Kabul and Herat, the habitations of the Hazara tribes are at heights between 5000 and 10,000 feet above the sea. Some of them claim to be of Turk origin; others in appearance very much resemble the Gurkha. They have the same high cheek-bones, the same small eyes, very little beard, and there is no doubt are of Tartar origin. Some profess the Sunni, others the Shiah form of Mahomedanism. A tribe inhabiting the country to the east of the Taemuri of Khaff, between it and the great range from Khairabad to Rosanak, are violent Sunni. These are of Tartar origin, and are predatory, selling their captives to the Turkoman, and plundering up to Herat. Of the

Hazara between Kabul and Herat, some claim descent from Toghiani Turk.

The Deh Kundi Hazara assert their origin from a Koresh tribe of Arabs. The Deh Kundi muster 12,000 fighting men.

The Faoladi of Gujaristan are said to be so called from a daughter of Afrasiab.

The Deh Zangi Hazara, who were reduced by Murad Bey of Kunduz, are Shiahs, and from them most of the Hazara slaves are procured. They are rich in flocks, and their cavalry have been estimated at from 12,000 to 28,000.

The Jaguri Hazara, who can assemble 5000, occupy the country bounded north by Gujaristan and Gul-Koh, east by Karabagh, Mukur, and Resana, south by Arghandab and Warazan, and west by Mahistan, 60 miles by 40 miles of beautiful and fertile valleys, and number about 50,000 souls. They are a short but well-made race, beardless, with flat nose, and some of their tribes follow the custom called Kooroo-bistan, which consists in lending their wives to strangers for a night or a week.

The Faoladi Hazara number 1000 families. They dwell between Kabul and Bamian.

The Deh Chafuran or Zard-alu, near Karabagh, are about 3000 families.

The Shaikh Ali, east of Bamian, from 3000 to 5000 families, occupy between Bamian, Ghorband, and the Helmand.

About forty other tribes are mentioned by Elphinstone, Burness, Wood, Leech, Lumsden, who estimate their numbers up to 300,000 souls.

The Hazara assume as their titles, Ikhtiar, Khan, Mehtar, Sadiq, Sultan, Turkhan, and Vali. Grain is scarce; their bread is tasteless; and their food consists of the flesh of their sheep, oxen, and horses, with cheese. In years of scarcity they voluntarily sell their children to the Uzbek slave dealers. The Shiah Hazara detest and persecute the Sunni Afghan, Aimak, and Uzbek, yet revere Ali and all Syuda. They speak a Persian dialect, and are friendly with the Kazzilbash and Parsivan. Almost every tribe is at war with their neighbours, and with the Aimak and Uzbek, and even the chiefs of their own race carry off many into slavery. Hazara do all the labouring work of Kabul. Their country yields lead and sulphur. They breed dumba (tailed) sheep and horses. Their animals have the fine shawl-wool with which they manufacture carpets and the fabric called Burrick. Hazara Zeidnat was a tribe in the fertile Kala Nao district, at the Murghab and Panjdeh rivers, who claim to be the original Hazara, and assume the title of Sar-i-khana. Their chief has jurisdiction over 28,000 tents. They are supposed to be Aimak. They had immense flocks and herds of sheep, goats, buffaloes, and camels. In 1847, Yar Muhammad marched against and defeated Karimdad, the chief of this tribe, and removed 10,000 families to Herat; and the Persians, after the capture of Herat in 1857, removed the whole tribe within Persian territory, and deprived them of all their baggage and cattle. They could assemble 4000 cavalry and 3000 infantry. Ferrier, in his *Caravan Journeys* (pp. 194-237), mentions that he fell among the Aimak Hazara on the Murghab river, and other tribes about Dev-Hissar, more to the north and east. He says their women take part in every war, manage the horse, the sword, and the fire-

lock. Their courage amounts to rashness, and they are more dreaded than the men for cruelty and fierceness. It is, and, so far as they know, has always been, a national custom. Here we have an intelligible explanation of the Amazons of Alexander, and the 'female hosts' of Nemuchi. In an attack by the Firoz Kohi on a Hazara tribe near Singlah, in which he was engaged, he says it was a remarkable sight to see brave and energetic Tartar women under fire amongst, and as forward as, the men; they fight also on horse-back, and ride or act under any circumstances as well as the other sex. He says 'more than one of them would, I have no doubt, meet any European horseman on more than equal terms: the dexterity with which they manage their horse is extraordinary, and their courage is not less great. They take part in every war, and the vanquished dread their cruelty more than that of the men.'—*Cal. Rev. No. 64*, p. 433; *Vigne's Personal Narrative*, pp. 118-171; *Musson's Journeys*, ii. pp. 217-295; *E. I. Parl. Papers, Cabool and Afghanistan*, pp. 135, 136; *Yule's Cathay*, ii. p. 540; *Ferrier, Journeys*, pp. 194, 222, 237; *MacGregor's, Bellew*, p. 205; *Campbell*, p. 54.

HAZARA, a British district in the Panjab, lying between lat. 33° 45' and 35° 2' N., and between long. 72° 35' 30" and 74° 9' E.; area, 2771 square miles. It is bounded on the north by the Black Mountains, the Swati country, Kohistan, and Chilas, on the east by Kashmir, on the south by Rawal Pindi district, and on the west by the river Indus. It consists of a long and narrow valley, shut in on either side by lofty mountains, whose peaks rise to 17,000 feet above the sea. A group of ancient mounds, extending into the southern portion of this district from that of Rawal Pindi, have been identified by General Cunningham with the site of Taxila. Under the successors of Ranjit Singh, the Hazara people declared for independence, and Syud Akbar of Sitana was elected king by the assembled chieftains. Enumeration over a total area of 2835 square miles disclosed a total population of 367,218. The Hindus amount to 5.06 per cent. The Pathan tribes were—Jadun, 15,711; Swati, 21,334; 'others,' 16,748. Other Mahomedans are—Dyuds, 11,700; Dhund, 14,412; Kharal, 10,734; Awan, 50,564; Gujar, 54,420. Hindus or Sikhs—Kshatriyas, 12,320; Brahmans, 3009. The Swati occupy the Khagan gorge; while the other tribes of Pathan origin inhabit the western frontier of the district. The Dhund and Kharal hold the south-eastern hills; the Awan and Gujar are scattered over the whole country, occupying inferior social positions. The Dhund, Kharal, and Swati in particular are of small stature, and deficient in strength.—*Imp. Gaz.*

HAZARIBAGH, a British district in Bengal, lying between lat. 23° 25' and 24° 48' N., and long. 84° 29' and 86° 38' E.; area, 7020 square miles; population in 1872, 771,875. A central plateau, about forty miles in length, has peaks rising from 2463 to 3445 feet above the sea. Its aboriginal tribes are—Santal, 35,906; Kol, 7307; Bhoi, 5835; Munda, 5664; Birhor, 132; Bhuiya, 73,824; Chamar, 26,112; Ghatwal, 31,134; Bhogta, 20,546. The agriculturists are—Kurmi, 40,538; Koeri, 27,550. The traders are—Banya, 13,669; and Teli, 29,876. The Rajputs, known as the Panwar or Ujjaini, formerly

supplied the Bhojpuria sepoys to the native army; and the Nagbansi, who are peculiar to Chutia Nagpur, are Rajputs of pure blood. The Srawak or secular Jains are well-to-do merchants, and occupy a high social position. The religious Jains live at the foot of Parasnath Hill, and are custodians of the temples in the village of Madhuban, from which pilgrims ascend Parasnath. The Birhor of Hazaribagh and Lohardagga live in the jungles or hill-sides in huts made of branches of trees. They have hardly any cultivation, and never touch a plough. The men spend their time in snaring hares and monkeys, and also trade in various jungle products. They worship female deities and devils, and it is supposed that they at one time practised cannibalism. The wealthier Ghatwals are considerable landholders in the N.E. of Hazaribagh, and claim to be zamindars under the permanent settlement of 1793.—*Imp. Gaz.*

HAZAR KINIAN, or the Thousand Springs, are in Kurdistan, in the district of Aalan, an alpine spot where innumerable springs start from the ground.—*Rich's Kurdistan*, i. p. 262.

HAZEL NUT, *Corylus avellana*.

Bindik,	BENG.	Avellane,	LAT.
Tsin,	CHIN.	Fenduk,	PERS.
Noisettes aveilcnes,	FR.	Avellans,	PORT.
Haselnusse,	GER.	Avellanas,	SP.
Naccinole, aveline,	IT.		

The fruit of different species of the Coryli or hazel trees. The kernels have a mild, farinaceous, oily taste, agreeable to most palates. A kind of chocolate has been prepared from them, and they have been sometimes made into bread. They are grown in Europe, are produced abundantly in China and in the Himalayas; and hazel nuts are imported into Bombay from the Persian Gulf.—*M'ulloch*.

HAZIRAT. HIND. In Mahomedan divination, in India, the flame of a charm-wick.

HAZIR ZAMIN. HIND. A personal bail.

HAZRAT. ARAB. An honorific appellation, equivalent to lord, reverence, Mr., worship. Lord Jesus, Hazrat Isa. Hazrat Ali, the lord Ali.

HAZRAT IMAM, a town on the south bank of the Oxus, producing good silk.

HEAD.

Ras,	ARAB.	Sar, *	HIND., PERS.
Tête,	FR.	Talle,	TAM., TEL.

The Mahomedan races of Arabia, Persia, and India, in acknowledging an order, stake their head on obeying it. The Arab will say, Dala rasi, On my head be it; and the Persian and Indian Mahomedan, Ba-sar-o-chashm, On my head and eyes be it. Horses are numbered by their head, as Bis ras asp, 20 head of horses.

Head cloths, or roomals, of cotton are manufactured in the Madras districts. They are always in squares of 5½ and 6 cubits, with lace borders, and are always red-coloured, printed with white spots. These are worn by Hindus as turbands, and are of value from Rs. 8 to 250.

Head-dress. The Turks of Turkey and of Egypt wear the turband and the red Fex cap. The Jews of Syria, Egypt, and Persia wear the turband (sar-band). All the Mahomedans and many Hindus of India use turbands. Many Persians wear caps. The Chinese history ascribes wing-like appendages to their emperor's cap. But wings attached to the cap are rather an ancient Hindu

feature, and are remarkably preserved in the state costume of the kings of Burma and the sultans of Java.—*Yule, Cathay*, i. p. lix.

HEAT. Poo hgying, BURM. The heat in S. Asia is sometimes very great. Major Sander's thermometer, on the Farrah-Rud in 1840, rose to 175° in the sun, a heat which enabled him to poach eggs in the burning sand. The mean heat at Bombay is 84°, at Madras 83°, Calcutta 79°, Delhi 72°. The gunpowder in the factory of Madras is dried on blackened platforms in the sun's rays, and the thermometer rises to 164° Fahr.

HEAVEN, the Assama, Al-Fardūs, and the Jannat of the Arab, Bihisht of the Persians, Himmel of the Germans, and Paridesh of the Hindus, with all is the place to which the souls of the virtuous dead are translated. Paridesh means the other world; Himmel is from Himalaya, the abode of snow. Mahomedans and Jews have seven heavens. The seven heavens of the Jews are—(1) the vellum or curtain, (2) the expanse or firmament, (3) the clouds of ether, (4) the habitation where the temple of Jerusalem and altar are situated, and (5) where Michael offers sacrifice; (6) fixed residence, (7) Araboth or special place of glory. The celestial place of the Saiva Hindus is Swerga, said to be on Kailasa, a mountain in the Himalayas north of Lake Manasa, also on Mount Meru. It is also called Sairibha, Misraka vana, Tavisha, Tridivam, Tripishtapam, and Urdhwa-loka. The heaven or paradise of Vishnu is Vaikuntha, also called Vaibhro, and sometimes described as on Mount Meru. The Saiva regards Vaikuntha, and the Vaishnava regards Kailas as merely a second Swerga. Each sect believes that the heaven of their opponents passes away with Indra's paradise at the Maha Prulay, but that their own heaven is not so much destroyed as re-created, Kailas merging into Maha Kailas, and Vaikuntha being elevated into Go Lok.

HEAVY SPAR or sulphate of baryta is found near the village of Pudoor, on the banks of the Tumbudra, about 7 miles from Kurnool, on the slope of a low range of hills. Dr. Royle found it near the convalescent depot at Landour.

HEBEL, the vanishing, Abel of the Bible.

HEBER. The passage. A historical term connected with the race of Arphaxad, indicating their passage near the Upper Tigris in a south-western direction.—*Bunsen*. See Joktan.

HEBER, REGINALD, bishop and metropolitan of India, an eminent writer. He was found dead in his bath at Trichinopoly on the 3d April 1826. He visited many parts of India, and consecrated most of the churchyards and churches, which led to after regulations. His narrative was published in London in 1828.

HEBREW. The language of Tyre and Sidon was pure old Hebrew. Abram was a Hebrew, who spoke Aramaic as his mother tongue, but migrated from the Trans-Euphrates country, and adopted the language of Canaan. His first-born son was Sidon. 1400 years after Joseph, Canaan was occupied by the Israelite, Edomite, and Canaanite as separate nations. In the Old Testament (Isaiah xix. 18) the language of the Bible is called the language of Canaan,—in no instance Hebrew. The Hebrew language is used by the small colony of Jews residing in Coochin and its neighbourhood. Hebrew is a branch of

the Semitic family of languages. Yemen and Arabia are considered by Jewish mediæval tradition as the land of the Ten Tribes, where powerful Jewish kings fought against infidels; this belief exists even now among Eastern Jews. About the middle of the 19th century, Rabbi R. Jacob Saphir visited Yemen. After R. Jacob Saphir, Joseph Halévy was sent to Yemen by the French Government, in order to copy Himyaritic inscriptions, and brought back manuscripts, which were partly acquired by the Bodleian Library. Mr. Shapira of Jerusalem revisited the Jews in Yemen, and through him the British Museum now possesses a considerable number of manuscript Bibles, many of them provided with the super-linear punctuation (usually called the 'Assyrian' vowel-points, while the punctuation used in our Bibles is called the 'Palestinian'), as well as with the Massorah. The Yemen manuscripts also contain a collection of Agadic books, called Midrashim, which embody many lost passages, known only from quotations by Maimonides and others. In Persia the Jews have adopted in their writings the native language, though still using Hebrew characters, just as their brethren have done in the Arabic-speaking countries, in Greece, Spain, France, and Germany, and as the Karaitic Jews have done among the Tatars. The Persian translation of the Bible to be found in manuscripts of the National Library at Paris is, according to Solomon Munk, not earlier than the 13th century and not later than the 14th; but Bishop Theodorus in the 5th century mentions a Persian translation of the Bible. So does Maimonides in the 12th century, who refers to a translation of the Pentateuch made several centuries before Mahomed. If this translation is not based on an early translation, the Jews in Persia must have kept up the ancient Persian dialect, just as the German Jews still speak in the ghettos the pre-Lutheran German, or as the Spanish exiles in the East speak ancient Spanish,—in a word, the 'langue des exilés,' as Voltaire styles the French of the Huguenots at Berlin. We know, in fact, that in the time of the second temple the Pentateuch lessons read in the synagogues (Acts xv. 21) were interpreted by the Methurgeman in the vernacular; hence the origin of the Targum or Chaldee translation. In Persia this rule was observed as late as the 13th century, for it is stated on the margin of Genesis xxxv. 22, 'The translation of this verse ought not to be read publicly.' The same is said in the Talmud, 'The history of Reuben is read (in Hebrew), but not in the translation.' In the synagogues of the Greek rite, the practice of reading the translation of the Haftarah (section of the Prophets, Luke iv. 16; Acts xiii. 14) was still kept up in the 12th century, according to a ritual manuscript in the Bodleian Library, which contains the Greek translation of the book of Jonah in Hebrew characters with vowel points. This book forms the prophetic lesson of the afternoon service (called Minhah) on the Day of Atonement, and it is the oldest piece in prose written in modern Greek. Besides the Hebræo-Persian manuscripts in Paris, the Imperial Library of St. Petersburg possesses a fragment of a Hebræo-Talmudic dictionary, written at Djorjan in 1339, and the British Museum an astronomical treatise, transcribed in Hebrew characters from a Persian

manuscript. This is about all that is known of Jewish writing in Persia.

Recently, Mr. Neubauer acquired in Paris a Pentateuch and Psalms, written at Koom in the year 1483, to which a Jewish calendar in Persian is attached. Another manuscript contains a translation of the Psalms, which is missing in the Paris collection. The copyist states that it was written for the great king, Kibleh-i-Alam (the Kibleh of the world), possibly Kablai Khan, who was the great protector of art and science in that dark age, about 1294. Indeed, at that time, when Argun was the vassal king of Persia, the Jewish physician Saad-ud-Daula was his minister of finances, who not only restored order to the finances of the kingdom, and forced the Mongol generals to obey law and justice, but also attracted learned men and poets to the court of his master. The most curious of the manuscripts is a fragment of an epopee, which has for its subject the whole of the biblical history, and is simply an imitation of Firdausi; its author, however, remains at present unknown.

HEDERACEÆ, the ivy tribe of plants, the Araliaceæ of A. Rich. Species of the genera panax, paratrophilla, and hederæ occur in India. *H. heterophylla* occurs in Penang, *P. palmata* in Nepal and Arakan, *P. terebinthacea* in Penang, and *H. exaltata*, *Thur.*, is a large tree growing in the central province of Ceylon, at an elevation of 4000 to 6000 feet. *H. umbellifera*, the Sarura of Amboyna, has a shrubby, unarmed stem, and yields a blackish or dull-brown resin with a very powerful aromatic camphorated smell.—*Eng. Cyc.*; *Voigt*; *Thur.*

HEDERA HELIX, the ivy.

Lablab kussus, . . .	ARAB.	Arbambal, . . .	JHELUM.
Brumbrum of . . .	BEAS.	Karmora, Mandia, KAGHAN	
Dakar, . . .		Parwatti, TRANS-INDUS.	
Kural, Kuril of . . .	CHENAB.	Karur, . . .	RAVI.
Harbambal of . . .	JHELUM.	Karbaru, Kaniuru, SUTLEJ.	

This ivy has a climbing stem, with root-like fibres. It is found between the Canaries and Europe on the west, and the northern parts of China on the east. In the north of India, and indeed occasionally in Italy, the berries, instead of being black as in Britain, are bright yellow, and it is supposed that this is more particularly the Hedera of the Roman poets. The flowers are yellowish, and appear late in the season, and, in consequence, are much resorted to by bees at seasons when little other food is to be had. It is common in the Panjab Himalaya, at places from 8200 to 8000 feet; occurs in the Salt Range and Trans-Indus; and Dr. Bellew got it at 9000-feet near the Safed Koh. It is stated to be a favourite food of goats, and in Kullu the leaves are said to be added to the beer of the country to make it strong.—*Dr. J. L. Stewart, Eng. Cyc.*

HEDGEHOG, the genus *Erinaceus* of the mammalia. There are in India two species, *E. collaris* and *E. mentalis*. *E. dealbatus*, *Swinhoe*, is Chinese.

HEDGES are not used for the cold-weather crops of India. For the garden crops, sugar-cane, betel vine, and others, the large species of *saccharum* are used. Quick hedges are formed in Japan of the *Lyctium Japonicum*, *Citrus trifoliata*, *Gardenia*, species of *Viburnum*, *Thuja*, *Spiræa*; and arbours are made of the *Dolichos polystachyos*. Dr. Cleghorn gives the following as the wild and cultivated hedge plants of India:—

I. Plants adapted for field enclosures.

<i>Opuntia Dillenii</i> , <i>Haw.</i>	<i>Epicarporus orientalis</i> , <i>Blume.</i>
<i>Agave Americana</i> , <i>L.</i>	<i>Jatropha curcas</i> , <i>L.</i>
<i>Euphorbia tirucalli</i> , <i>L.</i>	<i>Pisonia aculeata</i> , <i>Rox.</i>
<i>E. antiquorum</i> , <i>L.</i>	<i>Capparis sepiaria</i> , <i>L.</i>
<i>E. nivulua</i> , <i>Buch.</i>	<i>C. aphylla</i> , <i>Rox.</i>
<i>Cæsalpinia sepiaria</i> , <i>Rox.</i>	<i>Scutia Indica</i> , <i>Brong.</i>
<i>C. sappan</i> , <i>L.</i>	<i>Azima tetracantha</i> , <i>Lam.</i>
<i>Pterolobium lacerans</i> .	<i>Gmelina asiatica</i> , <i>L.</i>
<i>Guilandina bonduca</i> , <i>L.</i>	<i>Balsamodendron Berryi</i> , <i>Arn.</i>
<i>Parkinsonia aculeata</i> , <i>L.</i>	<i>Toddalca aculeata</i> , <i>Pers.</i>
<i>Poinciana pulcherrima</i> , <i>L.</i>	<i>Bambusa arundinacea</i> .
<i>Mimosa rubicaulis</i> , <i>Lam.</i>	<i>Bambusa spinosa</i> , <i>Rox.</i>
<i>Inga dulcis</i> , <i>Willd.</i>	<i>B. nana</i> , <i>Rox.</i>
<i>Acacia Arabica</i> , <i>Willd.</i>	<i>Dendrocalamus tulda</i> , <i>Nees.</i>
<i>A. concinna</i> , <i>D. C.</i>	<i>Pandanus odoratissimus</i> .
<i>Vachellia farnesiana</i> , <i>W.</i>	
<i>Hemicyclia sepiaria</i> , <i>W.</i>	

II. Ornamental plants forming inner fences.

<i>Lawsonia inermis</i> , <i>Wall.</i>	<i>Adhatoda vasica</i> , <i>Nees.</i>
<i>Lonicera ligustrina</i> , <i>L.</i>	<i>A. betonica</i> , <i>Nees.</i>
<i>Citrus limetta</i> , <i>Riss.</i>	<i>Craetophyllum hortense</i> , <i>Nees.</i>
<i>Morus Indica</i> , <i>L.</i>	<i>Gendarussa vulgaris</i> , <i>Nees.</i>
<i>Punica granatum</i> , <i>L.</i>	<i>Gardenia florida</i> , <i>L.</i>
<i>Phyllanthus reticulata</i> .	<i>Allamanda cathartica</i> , <i>L.</i>
<i>Hibiscus rosa Sinensis</i> , <i>L.</i>	

III. Plants used for edging garden walks.

<i>Pedilanthus tithymaloides</i> , <i>Poit.</i>	<i>Rosa semperflorens</i> , <i>Curtis.</i>
<i>Vinca rosea</i> , <i>Willd.</i>	<i>Heliotropium Curassavicum</i> , <i>L.</i>
<i>Rosa Indica</i> , <i>L.</i>	

The Cacti, Agavæ, and Euphorbiæ are adapted to the arid districts, their structure enabling them to exist, when refreshed with only occasional showers; the Mimosæ and Cæsalpinæ seem to enjoy the somewhat more cold and moist climate of the Balaghat districts; while the Bambusæ and Pandanæ luxuriate in the rich loamy soil of the Mulnad (i.e. rain country). Plants for railway fences ought to differ as the line is continued through various districts, in accordance with the conditions under which particular plants thrive best between certain limits of temperature and moisture.—*Thunberg's Tr.* iii. 8; *Cleghorn in Rep. Brit. Ass.* 1850, p. 311.

HEDUNG of Java, the chopping knife of the Tenger mountaineers.

HED-YA. MAHR. A drover or cattle-dealer.

HEDYCHIMUM, a genus of plants belonging to the natural order Zingiberacæ. 28 species occur in the East Indies, some of them with sweet-smelling flowers.

Hedychium coronarium, *Lint.*

Doolal champa, . . .	BEKG.	Ganda sulh, . . .	MALAY.
Khet lan-thæ, . . .	BUM.		

The garland flower, much cultivated. The flowers are fragrant; colours, orange, scarlet, yellow, and white. The yellow and white varieties are both common. This is the most charming of all the plants of this natural order; the great length of time it continues to throw out a profusion of large, beautiful, fragrant blossoms, makes it particularly desirable. The plants are increased by dividing the roots.

Hedychium spicatum, *Royle.*

<i>Ban-haldi</i> ; <i>Shlui</i> of BEAS.	<i>Bazar Roots.</i>
<i>Sidhoul</i> , . . . HIND.	<i>San-nal</i> , <i>San-lah</i> , CHIN.
<i>Ban-kela</i> ; <i>Saki</i> of RAVI.	<i>Kapur kachri</i> , . . HIND.
<i>Khor</i> ; <i>Shalwi</i> , . SUTLEJ.	<i>Kachur</i> , <i>Seer</i> , <i>Rutti</i> , ..

This grows throughout the East Indies, in Nepal, in the Panjab Himalaya, up to near the Jhelum, at least, at from 8500 to 7500 feet, and also in China. Its large broad leaves are twisted, and made into coarse mats for sleeping on, etc. The root is fragrant, warm, and aromatic; and Dr.

Royle thinks it may probably be the ritte, or lesser galangal of Ainslie. The root, capoor cutchery, in China, is cut into small pieces and dried for exportation; has internally a whitish colour, but externally it is rough and of a reddish colour; it has a pungent and bitterish taste, and a slightly aromatic smell. It is exported to Bombay, and from thence to Persia and Arabia; it is said to be used in perfumery and for medicinal purposes, and also to preserve clothes from insects. In Garhwal they are used in washing the newly married; and Madden states that they are pounded with tobacco for the hookah.—O'Sh; Marsden; Roxb.; Voigt; Stewart.

HEDYOTIDEÆ, a section of plants of the natural order Cinchonaceæ, containing species of Wendlandia, Dentella, Hedyotis, etc. There are ten known species of Hedyotis.

Hedyotis Burmanniana, R. Br.

Oldenlandia biflora, Lam.

Gerontegia biflora, Cham. and Schl.

Khet-papra, . . . BENG. | Purputi, Papra, . . . HIND.

Two-flowered Indian madder, is a plant of Ceylon, both Peninsulas of India, and Bengal. Appears in moist ground in the rainy season. The whole plant is used in infusion as an excellent tonic and febrifuge in chronic fever. Dose 1 to 2 drachms; price 8 annas per lb. Other species also occur, and are called Ganda badalee and Poonkha.

Hedyotis Heynei, R. Br.

H. herbacea, Willd. | *Oldenlandia herbacea*, Roxb.
Tolla neta vemu, TEL.

A plant of the Peninsula of India.—Irvine.

Hedyotis umbellata, Lamarck.

H. hispida, Roth.

H. Indica, Rcm. and Sch. | *Oldenlandia umbellata*, Linn.

Chay-root, ANGLO-TAM. | Saya, TAM.

Indian madder, . . . ENG. Emburel cheddi, . . . TEL.

Ohoya, SINGH. Cherivelu, . . . TEL.

Sayan; Sayan mul, . . .

This dye plant grows in sandy soils on the Coromandel coast. The root of that which grows wild is reckoned the best, but it is also cultivated to some extent. For the cultivation of the plant the finest sandy soil is required, as being the most favourable to the free growth of the root, on the length of which the value of the article greatly depends. The cultivation commences in the end of May or beginning of June, with the first falls of the south-west monsoon. During the space of three months the sand is subjected to repeated ploughings, and is thoroughly cleaned from all weeds. Between each ploughing it is manured, and after the last ploughing it is levelled with a board, and formed into small beds of about six feet by three. The seed, which is extremely minute (so much so that it is impossible to gather it except by sweeping up the surface sand into which it has fallen, at the end of the harvest), is then sown by spreading a thin layer of sand over the prepared beds. They are then kept constantly moist, and are watered gently with a sieve made of palmyra fibres, five or six times a day; care being taken that the water is quite sweet and fresh, for which purpose it is obtained from wells newly dug in the field. At the end of a fortnight the seeds under this treatment will have germinated freely, after which the young plants are only watered once a day, in addition to which, liquid cow-dung, greatly diluted with water, is daily sprinkled over them. In about four

months more, or at the end of six months from the time of sowing, provided the season has been good and the falls of rain regular, the plants will have reached maturity, and the roots be ready for digging. But no artificial irrigation will compensate for a failure of the natural rain; and when this happens, the plants must be left for three or even four months longer, in which case the produce will be deficient both in quantity and quality. But in an ordinary season the produce of a podu, or plot containing an acre and three-quarters, will yield from 5 to 10, averaging about 8, candies of 500 lbs. each.

The plants are dug up with a light wooden spade tipped with iron, and are tied into bundles of a handful each, without cutting off the stocks. They are then left to dry, the leaves wither and fall off, and the bundles are weighed and removed. Before the digging begins, the seeds, which have now ripened, are shed, and, being exceedingly minute, become inextricably mixed with the sand, the surface of which is therefore carefully scraped up, and reserved for future sowings.

It is largely used by the Indian dyer in the south of India. It furnishes a red dye similar to manjith. Experiments in Great Britain with the chay-root have hitherto failed, in consequence, it is supposed, of deterioration during the voyage. In the case of this and of some other Indian dye-stuffs, the colouring matter could be extracted similarly to indigo before it is exported.—O'Sh; Ains.; R. Mad. Ex. 1857. See Chay-root; Dyes.

HEDYSARUM. Ti-yu, CHIN. Several occur in China, where the roots are employed as a styptic or vulnerary. The leaves are used as a vegetable, and as a substitute for the proper tea-leaf.

H. lineare is used in Cochin-China as a stomachic, and *H. alpinum* in Siberia for the same purpose.

H. junceum grows in vast quantities in Shek-hawatti and elsewhere, near Jeypore; the small branches are sweet, and eaten by camels and other cattle. This becomes a considerable bush, and has no thorns.

H. edysarum tuberosum, Roxb.

Pueraria tuberosa.—Bank's Ic. Kemp. tab. 25.

Kudsumi, . . . HIND. | Dasee goomodee, . . . TEL.

A rare species, a native of the valleys far up amongst the mountains. It flowers during the hot season, at which time it is perfectly naked of leaves, being deciduous about the beginning of the cold season. The root, peeled and bruised into a cataplasm, is employed by the natives of the mountains where it grows to reduce swellings of the joints.—Roxb. ii. 863; Gen. Med. Top. p. 205; Smith.

HEEL. This part of the body is often alluded to by oriental nations. The only vulnerable part of Krishna's body was his heel, in which he was shot by a Bhil.

HEEMACHA. HIND. A bag made of the skin of a lamb, used by fakirs.

HEEN. Every Chinese province is divided into a certain number of districts, called Fu, Ting, Chow, or Heen. A Fu is a large portion or department of a province under the general control of a civil officer, immediately subordinate to the head of the provincial government.—Sirr, Chinese.

HEERA-KASSEES. HIND. Dry persulphate of iron, used in dyeing, in making ink, blacking

leather; also in medicine, and made into missi to apply to the teeth. To make—

Black missi.—Heera-kassees, chaipal harra, choonigond, lila tootiya, iron filings, kuthi, equal parts, pounded and mixed; rubbed on the gums.

White missi.—Sufaid soorum (crystallized carbonate of lime, double refracting spar) and cinnamon pounded together; used as tooth-powder.

Sada-kassees.—Impure sulphate of iron, the refuse from the manufactory of the sulphate of copper; four seers for one rupee.

HEERA-KHOND, a place in Assam where diamonds occur. See Diamond.

HEERANA or **Hirana**, in E. Oudh, manuring a field by penning a herd of cattle or flock of sheep in it for several hours. K'hhutana is used in a similar sense in Rohilkhand. This practice is known in England under the name of fold-course or foldage, and formerly meant a privilege which several lords reserved to themselves of setting up folds within their manors for the better manurance of the same.—*Elliot, Supp. Gloss.*

HEGGADE. **KARN.** The headman of a town or village, but especially applied to one of the Jain religion. It is also used by certain castes as an affix to proper names, to intimate respectability, corresponding with Sahib or Mian in Hindustan.—*Wilson's Glossary.*

HEI-MIN, in Japan, all below the nobles; the commonalty.

HEJAZ, **ARAB.**, is a large province of Arabia, containing the two sacred cities, Mecca and Medina. But geographers differ much as to its limits. Burton says that the Arab of the Hejaz still uses heathenish oaths and heathen names, few being Mahomedan. Their ordeal of licking red-hot iron, their practice of the salkh or scarification as a sign of manliness, and their blood revenge, their eating creatures which have not been made lawful by the usual formula, and their lending their wives to strangers, he indicates as showing how little Mahomedanism has influenced the uncivilised parts of the country.—*Burton's Mecca*, iii. 79.

HELA, a man of a low caste; an inferior division of the Bhangi, engaged in the lowest menial offices. The Hela pride themselves on eating the leavings of Hindus only.

HELEOCHARIS TUBEROSA, *Ram. and Sch.*, the Ma-tai or Pe-tai of the Chinese, is a rush which is cultivated in ponds for its edible tubers. *H. fistulosa* and *H. plantaginea* of Australia and India and *H. sphacelata* are allied plants.—*Smith.*

HELPER, **DR.**, of the Bengal medical service, and a celebrated botanist, was murdered by the natives of the Andamans, in January 1839. See *Aa. Jour.* 1840, vol. xxxiii. Author of Notice of the Mergui Archipelago, *ibid.* vol. xxxiii.; Report on Tenasserim and the surrounding Nations, *Bl. Aa. Trans.* vol. viii. Along with Lieutenant Hutchinson, he reported on the new coal-field of Tenasserim in *Bl. Aa. Trans.* 1839, vol. viii. 385. Author of Researches on the Tenasserim Coast, in *Friend of India*, 165, 638.—*Dr. Buist, Catalogue.*

HELIANTHUS ANNUUS. *L.* Sun-flower.

Shooria mukhi, . . . **BENG.** | **Aditya bhakti chettu**.
Sura j mukhi, . . . **HIND.** | **Poddu or Prodda**.
Suria mukhi, . . . **SANSK.** | **tirugudda chettu**, **TEL.**

It is indigenous in Mexico and Peru; it was early introduced into Europe after the discovery of America. It is one of the cistaceae, or rock-rose tribe. An acre has been known to yield

50 bushels of seed-like nutlets, from which 50 gallons of oil have been pressed, useful for the table, for machinery, soaps, and for painting. The seeds are valued for feeding fowls, also as a substitute for coffee. The large flower-heads yield much honey, the stalks a useful textile fibre, and the blossoms a brilliant, lasting yellow dye. The absorbing and exhaling powers of this plant are great, and it is valuable for raising quickly vegetation around fever morasses. A sun-flower, according to Laccupidan, will exhale 1½ lb. of water in a day. Its products are yielded in a few months.—*Roxb.; Von Mueller.*

HELIANTHUS TUBEROSUS. *Linn.*

Bheamoka, . . . **BENG.** | **Jerusalem artichoke**, **ENG.**

A native of Brazil, but the plant is cultivated throughout India as a vegetable in gardens. Jerusalem artichoke is a corruption of the Italian Girasole. It was introduced into Europe at the Farnese Garden at Rome, whence it was originally distributed. The roots are composed of a number of oblong tubercles, very large and fleshy, reddish outside and white within, resembling a potato; the stems are herbaceous, and upright. In France it is also known by the name of topinambour and poire de terre. According to Braconnot and Payen, the tubers do not contain fecula, but a vegetable principle called inulin or dahlin. These tubers, when cooked, form a good substitute for potatoes, and by some are even preferred. The foliage and tubers increase the milk of cows; the stem is rich in textile fibre. Its yield is as plentiful as potatoes, with less labour; and in fair land, rich in potash, continues uninterruptedly from year to year.—*Roxb.; Von Mueller.*

HELICIA ROBUSTA. *Wall.*

Rhopala robusta, *Roxb.* | **H. Travancorica**, *Bedd.*

A very handsome, good-sized tree, not uncommon on banks of streams on the Travancore and Tinnevely mountains, above Panpanassam, at about 4000 feet elevation; it also inhabits Eastern Bengal and Burma.—*Beddome, Fl. Sylv.*

HELICIDÆ, a family of Gastropodous mollusca, the land snails. See Mollusca.

HELICTERES ISORA. *Linn.* Screw-plant.

Isora corylifolia, *Sch. and End.*

Dhamni ,	DUKH.	Avurtunni ,	SANSK.
Murad sing? ,	"	Leeviya-gaha ,	SINGH.
Kewun? Kawanni ,	"	Valambirikai ,	TAM.
Maror-phalli ,	HIND.	Syamali ,	TEL.
Kupaisi , Joa-ka-phal ,	"	Ada syamali , Kavanchi ,	"
Kisht , Bur-kisht ,	PERS.	Nooli-tudda ,	"

This plant has a singular-looking contorted capsule, consisting of five fibres closely twisted in the shape of a screw, of various lengths, from 1 to 2½ inches. A liniment is prepared from the powder of it, which is supposed to be a valuable application in cases of offensive sores inside of the ears. The Telugu name means that the juice of the root is a powerful stomachic. The powder of the fruit has also been used in griping pains of the bowels, but solely because the twisted fibres of the capsule were considered to stamp it as a remedy, according to the ancient doctrine of signatures. The fibre of the bark makes good ropes.—*Powell; Stewart; Ains. Mat. Med.* p. 118; *O'Sk.* p. 228.

HELICTIS. *Gray.* A genus of the mammalia, belonging to the order Carnivora and family Felidæ. The species inhabit Eastern Asia, and have the general appearance and colouring of *Myasus*, combined with a dentition resembling

HELILAH.

that of Gulo or Mustela, but differing from both the latter genera in the large internal lobe of the upper carnivorous tooth. There are three species, —*H. moschata* of China, *H. Nepalensis*, the Nepal wolverine, and *H. orientalis*, *Horsfield*, from Malayana. They have long claws, adapted for burrowing.—*Jerdon, Mammals*, p. 80; *Eng. Cyc.*

HELILAH. ARAB., PERS. Myrobalan of *Terminalia chebula*, *Roxb.* Of these there are six kinds,—*Helilah zirah*, the young fruit, dried, of the size of cumin seed; *Helilah jaol*, size of a barley-corn; *Helilah zengi*, size of a raisin, and black like a negro; *Helilah chini*, larger than *Helilah zengi*, and greenish; *Helilah asfer*, fruit near maturity and yellow; *Helilah kabuli*, the fruit at full maturity, called also *Sarwarri hirda*. *Helilah-i-siah*, PERS., *Helilaj-ul-aswad*, ARAB., *Helileh-i-kalan*, PERS., *Helilaj-ul-kabuli*, ARAB., *Terminalia chebula*, myrobalan.

HELIOPOIIS or *Baalbec*, the *Baalith* of Scripture, and *Heliopolis* or temple of the sun of the Greeks, is now a ruin. It is on the lower slopes of the Anti-Libanus, 43 miles north-west of Damascus, in lat. 34° 1' 30" N., and long. 36° 11' E. The date of its origin is unknown; but Antoninus Pius built a great temple there. It was sacked in A.D. 748 by the Mahomedans, and finally pillaged in A.D. 1400 by Timur, and now contains about 100 Arab families, cultivators, and herdsmen, who reside in a quarter surrounded by a modern wall. The great temple of the sun and its buildings are at the western end, outside the modern walls. There were rows of pillars in the Corinthian order of architecture, almost all of which have now fallen, as also have the roofs of great courts, one of them 144 feet square, and vaulted passages. On the east is a court 230 feet by 118 feet, which had arches on its western and northern sides. See *Baalbec*.

HELIOS. The sun-god. See *Aditya Ra*; *Heri*.

HELIOTHIS ARMIGERA, an insect of the family Noctuidæ, which in innumerable hordes attacked the poppy crops of Shahabad and Patna in the season 1877-78; it is equally destructive to the cotton crops. It eats into the capsules of the poppy and cotton; careful hand-picking is the sole remedy. The pupæ become entrapped in the capsule. In February and March it attacks the coffee plant.

HELIOTROPE or *Bloodstone*, a quartzose mineral, which occurs abundantly in the trap rocks of the Dekhan.

HELIOTROPIMUM, a genus of flowering plants of the natural order Boraginaceæ; several species are known in India. They should be grown in a soil more approaching to sand than clay. They are easily cultivated in pots, or the flower beds; propagated by cuttings in sand under glass. They require to be protected from the hot winds.—*Roxb.*; *Riddell*.

Heliotropium Brevifolium, *Wall.*

Chiti mirak, . . . DERAJAT. | *Chittiphub*, . . . PANJ.

The herb is said to be laxative and diuretic; the seeds are emenagogue.—*Wallick*; *Powell*.

HELIX, a genus of land-snails very numerous in India.

HELL.

Enfer, FR. | *Narakam*, SANSK.
Hölle, GER. | *Inferno*, IT.
L'Inferno, IT. | *Jahannam*, TURK.

Amongst Jews, Christians, Mahomedans, and

HELOT.

Hindus, a place of after punishment, to which the souls of wicked people are sent. Mahomedans call it by the Hebrew and Arabic term, *Jahanam*, but also *Dozakh*; the Hindus, *Narakam*. Amongst the Japanese, *Gokuja*, or hell—or, as it is otherwise called, *Roja*—is their cage. By this they mean their prison, which stands about the middle of the town, at the corner of a descending street. The Hindus have seven or eight hells, named *Atala*, *Nitala*, *Gabhastimat*, *Mahatala*, *Sutala*, and *Patala*, each under a regent. The *Siva Purana* enumerates eight; other names not enumerated above, being *Tala*, *Vidhi Patala*, *Sarkara-bhumi*, and *Vijaya*.—*Hist. of Japan*.

HELLEBORUS NIGER, black hellebore.

<i>Kbertik</i> , <i>Khorbeck</i> , ARAB.	<i>Kuddu</i> , . . . GUJ., HIND.
<i>Kurbec-ul-aswad</i> , . . .	<i>Helleboro</i> , . . . PORT.
<i>Neiswurtel</i> , DAN.	<i>Kataka-rohini katuruni</i> ,
<i>Kalikutki</i> , DUK., HIND.	SANSK., TAM., TEL.
<i>Schwartz Neiswargel</i> , GER.	<i>Calurana</i> , . . . SINGH.

Under the native names, two kinds of hellebore are commonly met with in the Indian bazars, brought from Nepal and the Red Sea. The roots of both plants are used in medicine; they are much used by farriers, and occasionally by native practitioners, as a powerful cathartic in maniacal and dropsical cases. The roots of one kind occur in pieces of 4 to 6 inches, are black all through their substance, externally of a greyish colour, with numerous joints. The second variety is in similar pieces, but of a whiter colour internally.—*Fauk*; *O'Sa* p. 168.

HELL-WATER, a narcotic spirit, distilled in Java from the fleshy part of the fruit of *Arenga saccharifera*.

HEIMAND RIVER is the *Etymander* of the classics, and the *Hætumat* of the Vendidad. It rises at *Fazindaz*, in the west slopes of the mountains of *Paghman*, about lat. 34° 40' N., and long. 68° 2' E., and, flowing generally to the S.W., after a course of 700 miles falls into the lake of *Seistan*. It is fordable at fourteen places. It is capable of being navigated by steamers. Its banks are fertile and well wooded, and an industrious population at one time occupied it, but left it, disgusted with the insecurity that prevails; and the accounts of it by travellers, writing at different times, have greatly varied.—*MacGregor*, p. 335; *Malcolm's Persia*, i. p. 3; *Pottinger's Tr.* p. 316; *Ferrier's Journey*, p. 428. See *Aria Palus*.

HELMSMAN, the *Sikani*, HIND., *Jurumüdi*, MALAY. *Sikani* is from *Sukhan*, a helm. *Sukhani*, a helmsman.

HELOT. Modern India is largely inhabited by Hindus proper and *Helot* races, who have become completely or partially amalgamated into Hindu society. The superior *Helot* classes, all over Northern India, cultivate to a considerable extent either on their own account or as the servants of others. In the south of India are the *Pariah*, who are represented in the Canarese *Karnatica* by the *Holar*, and amongst the *Mahrattas* by the *Mhar* and *Dher*, and by the *Malla* in *Telingana*. The leather-workers, the *Chakili* of the *Tamil* people, are the *Madiga* of the *Teling* race, and the *Mhang* of the *Mahrattas*. In Northern India, the *Dom*, *Dam*, and *Dumi*; in Central India, the *Kharwar* or *Kheroar*; or ancient *Santal*, and the present *Kheria*. In the *Panjab* are the *Chura* serfs, descendants of the *Chaura* military *Helots* of the *Mahabharata*.

HELWINGIA.

Throughout India are the Coolie or Kuli; and the Hadi is a Helot race in Bengal.—*Mfr. Campbell.*

HELWINGIA, a very anomalous genus of Himalaya and Japan, having the unisexual flowers sessile upon the middle of the leaf, owing to the adhesion of the flower-stalk to the leaf-stalk and midrib. *H. Himalaica*, *Hook.*, grows at 7000 feet.

HEMA. **SANSK.** Gold. Hemadai, golden mountain, *i.e.* Meru. Hema-Kuta, golden peak, a range between the Himalaya and Meru.

HEMA CHANDRA, a great Jaina teacher who lived in the 12th century. He gained over to the Jaina faith the Hindu kings of Gujerat, shortly after which these princes disappeared before the Mahomedan conquests. Hema Chandra seems to have been the author of *Abhidana Chintamani*, a useful vocabulary, and of a life of Mahavira, printed under Mr. Colebrooke's superintendence.

HEMADRI, a Brahman of the Madhyandiniya Sakha, of the Sukla Yajur-Veda. He wrote several books, the *Chaturvarga Chintamani* on law, the *Muktaphala* on religion, and a Commentary on *Wagblata*, called *Ayur Veda-Rasayana*.

HEMBAKO, the Tibetan name of the territory in Ladakh which the Kashmirians call *Dras*.

HEMEROCALLIS, a genus of plants belonging to the natural order Liliaceæ, called day-lilies. *H. flava* is a native of Germany, and *H. fulva* of Italy; *H. disticha* from China; *H. Sieboldii* from Japan. *H. speciosa* and *H. graminea* are cultivated in gardens.

Hemerocallis fulva, *Willd.*, *Nargas*, *Gool-nargas*, **HIND.**, the narcissus of India, cultivated as a flowering plant.

Hemerocallis graminea, *Tatarinov*, *Huen-t's'au*, **CHIN.** In China this is regarded as a charm for dispelling grief, and is worn in women's girdles to favour the birth of sons. The young leaves are eaten, and intoxicate slightly. The flowers of this day-lily, when dried, are called the *Kin-tain-t'ai*.—*Smith*; *Rozb.* ii. p. 168; *Gen. Mod. Top.*

HEMICYOLIA, a genus of moderate-sized trees of Ceylon and the Peninsula of India. *H. Gardneri*, *Thw.*, not very abundant; *H. lanceolata*, *Thw.*, grows at Caltura, Ceylon; and *H. sepiaria*, *W. and A.*, *Weera-gass*, **SINGH.**, is abundant in the hot, drier parts in the peninsula of the island.

H. Elata, *Bedd.*, is a lofty, straight, glabrous tree, very common in the dense moist forests of the Wynad (2000–4000 feet elevation), also in the Anaimallays and Tinnevely mountains. The leaves are less coriaceous than in *H. venusta*, but have exactly the venation and shape of that species, which is a small drooping tree with a different inflorescence. *H. sepiaria* has much more coriaceous, differently-shaped leaves, and is scarcely more than a shrub; the timber is strong, and much valued for building purposes.—*Thwaites*; *Wight*, *Icones*; *Beddome*, *Fl. Sylv.* p. 279.

HEMIDACTYLUS TRIEDRUS, a pretty little white and spotted lizard of Labuan. It is one of the *Geckotides*.

HEMIDERMUS INDICUS. *R. Brown.*

<i>Smilax aspera</i> .	<i>Asclepias pseudosarsa</i> , <i>Rozb.</i> ,
<i>Periploca Indica</i> , <i>Willd.</i>	var. <i>latifolia</i> .
Ununtamul, BENG. , HIND.	Nunnari, . . . TAM.
Kural,	Gadi Sugandhi, . . . Tel.
Muckwy, DUKE.	Nalla Sugandhi, . . . "
Magrabs, HIND.	Pala Sugandhi, . . . "
Naru nindi, MALAL.	Suganda-pala, . . . "
Shadipa, SANSK.	Pala Chukhandaru, . . . "
Iri muru, SINGH.	Tella Sugandhi-pala, . . . "

HEMILEIA VASTATRIX.

Indian Sarsaparilla, or Country Sarsaparilla, is a common plant all over the Indian Peninsula. The root is long and slender, with few ramifications, covered with rust-coloured very fragrant bark, the odour remaining after drying, and strongly resembling that of new-mown hay. The roots have long been employed in the Madras Presidency as a substitute for sarsaparilla, and have been also used in England, and very highly spoken of. It can be purchased of good quality at from 2 to 4 annas the seer. It occurs in bundles about a foot and a half long. Much of its virtues depend on a volatile principle; and it should not be employed in decoction, as long boiling dissipates the active ingredient. The infusion is a fragrant and highly effectual alterative and diuretic, of great service in secondary venereal affections and chronic rheumatism. It is in every respect a perfect substitute for sarsaparilla.—*O'Sh. Disp.*

HEMIGYMMA MACLEODII. *Griff.!*

Cordia Macleodii, *Hooker.*

Deyngan of . JUBBULPUR. | Botku, **Tel.**

This tree is abundant in the Godavery forests near Mahadeopur, and near Warangal, and it is also indigenous to the Jubbulpur forests, where it is called Deyngan. It yields a very beautiful wood, which would answer as a substitute for maple for picture frames, etc.—*Captain Beddome.*

HEMIGYROSA CANESCENS. *Rozb.*

Molinsæ canescens, *Rozb.* | *Sapindus tetraphyllus*,
Oupania canescens, *W. A.* | *D. C.*

Kurpa, **MAHR.** | Korai, **Tel.**
Nekota, **TAM.**

A common tree in jungles on the eastern side of the Madras Presidency, Salem, Cuddapah, Mysore, etc.; also found in Bombay and Ceylon. It does not ascend the mountains much above 8000 feet. The wood is whitish, and is occasionally used by the natives for building purposes.—*Beddome*, *Fl. Sylv.* p. 151.

HEMIGYROSA DEFICIENS. *W. A.*

Sapindus deficiens, *W. A.*

A small or middling-sized tree of the Tinnevely ghats, common at 2000 to 4000 feet elevation, Anaimallays (head of the ghat from Palghat up to the Neliampatty coffee estates) 2500 feet elevation, and towards the higher ranges at 5000 feet elevation. It appears to be in flower all the year round.—*Beddome*, *Fl. Sylv.* p. 281.

HEMIGYROSA TRIOCARPA. *Thw.* A moderate-sized tree. One variety grows in the central province of Ceylon up to an elevation of 8000 feet, another in the hot, drier parts of the island.—*Thw. En. Pl. Zeyl.* i. p. 56.

HEMILEIA VASTATRIX, the coffee-leaf disease, or leaf-fungus, has for several years seriously affected the coffee trees of the island of Ceylon. Though requiring careful inspection for its detection, it was present upon all the coffee trees examined about 1879. With the help of the microscope, it is found at all times to pervade the greater part of the stems and older leaves, in the form of very fine branching filaments, its effects being apparent in numerous somewhat translucent spots, which may be observed when holding one of the older leaves against the light. The direct injury so caused to the coffee tree is, however, very slight, as compared with the effect produced when the fungus attacks the young leaves, causing them to fall prematurely. The presence of the fungus-filaments in such abundance on the outer

surface of the tree is quite sufficient to account for phenomena which it was first thought must be attributable to a poisoning of the juices of the tree, by an absorption of the fungus matter through its roots. The latter idea must therefore be given up, and the disease considered as external, except when it appears within the tissue of the young leaves. Subsequently, from these enclosed masses of filaments short branches are produced, which emerge from the pores, and bear the conspicuous orange-coloured spores or reproductive bodies. Some of these spores have been observed to germinate on the outside of the leaf, producing branched filaments of exceeding tenuity, which grow with marvellous rapidity all over the surface of the leaf, and beyond to the stems. The ends of some of these filaments, too, have been observed to enter the pores of the leaf, to form fresh disease-spots and fresh crops of spores. The true Liberian coffee is said to be of hardy habit, and more able to resist the ravages of this disease.

HEMIONITIS CORDIFOLIA. In Tenasserim, near the sea-shore, this species of mule fern, with cordate fronds, is sometimes seen.—*Dr. Mason.*

HEMIPTERA, an order of insects; several genera occur in India; amongst them—

Fam. Pachyridæ, Dall. Cantuo, Bymot and Serv. ; Calliden, Lap.

Fam. Eurygasteridæ, Dall. Trigonosoma, Lap.

Fam. Plataspidæ, Dall. Coptosoma, Lap.

Fam. Halydidæ, Dall. Halys, Fabr.

Fam. Pentetamidæ, St. Pentatoma, Olive. ; Catacanthus, Spin. ; Rhaphigaster, Lap.

Fam. Edessidæ, Dall. Aspongopus, Lap. ; Tesseratoma, Lep. and Serv. ; Cyclopelta, Am. and Serv.

Fam. Phyllocephalidæ, Dall. Phyllocephala, Lap.

Fam. Mictidæ, Dall. Mictis, Leach. ; Crinocerus, Burm.

Fam. Anisroscidæ, Dall. Leptoscelia, Lap. ; Serinetha, Spin.

Fam. Alydidæ, Dall. Alydus, Fabr.

Fam. Stenocephalidæ, Dall. Leptocoris, Latr.

Fam. Coreidæ, Steph. Rhopalus, Schill.

Fam. Lygæidæ, Westw. Lygæus, Fabr. ; Rhyparochromus, Curt.

Fam. Aradidæ, Wlk. Piestosoma, Lap.

Fam. Tingidæ, Wlk. Callonianna, Wlk.

Fam. Cimicidæ, Wlk. Cimex, Linn.

Fam. Reduviidæ, Steph. Piratus, Burm. ; Acanthaspis, Am. Serv.

Fam. Hydrometridæ, Leach. Ptilomera, Am. Serv.

Fam. Nepidæ, Leach. Belostoma, Latr. ; Nepa, Linn.

Fam. Notonectidæ, Steph. Notonecta, Linn. ; Corixa, Geoff.

Of the aquatic species, the gigantic *Belostoma Indicum* attains a size of nearly three inches. Some of them are most attractive in colour. A green one, often seen on leaves, is quite inoffensive if unmolested, but if irritated exhales an offensive odour. Insects known as coffee bugs have occasioned to the coffee planters great losses, against which, seemingly, at present they have no means of protecting themselves. The whole order emit a powerful odour, and they present a very large proportion of gay-coloured and conspicuous insects. The ladybirds (*Coccinellidæ*) and their allies the *Eumorphidæ* are often brightly spotted as if to attract attention, but they can both emit fluids of a very disagreeable nature; they are certainly rejected by some birds, and are probably never eaten by any. The genera of Homopterous Hemiptera, cicada, lystra, monophlebus, polyneura, and cyrene have several species in the E. India.—*Tennant.* See *Insecta*.

HEMIRAMPHUS, a genus of fishes of the family *Scombræsidæ*, which includes the genera *Belone*,

Scombresox, *Hemiramphus*, *Arthamphus*, and *Exocoetus*.

Hemiramphus macrorhynchus of the Bay of Bengal, near Pondicherry, has an elongated body, and proboscis-like member proceeding from its mouth.

H. Russell, *Cur. and Val.* Toda pendek (Pendek, short). The Malays thus denominate all the species of *Hemiramphus*, to distinguish them from those of *Belone* (Toda of the Malays). At Penang this species is numerous at all seasons, but larger individuals occur at irregular intervals. They appear at European tables under the appellation of guard fish.—*Cantor ; Hartwig.*

HEMITRAGUS HYLOCRIUS. *Jerdon.*

Kemas hylocrius, Ogilby. ; Capra warryato, Gray.

Ibex, ENG. ; Warri-adu, TAM.

Neilgherry wild goat, Warri-atu,

This is found on the Neilgherry and neighbouring hills, extending along the Western Ghats nearly to Cape Comorin; also on the Pulney Hills, and is called ibex by the Madras sportsmen. They are very wary, feed like a flock of sheep, and flee to the precipices when alarmed. Length, 4 ft. 2 in. to 4 ft. 8 in. to root of tail; tail, 6 or 7 in.; height at shoulder, 32 to 34 in.; horns occasionally 12 to 15 in.—*Jerdon*, pp. 288–90.

HEMITRAGUS JEMLAICUS. *Jerdon.*

Capra jharal, Hodgs.

C. quadrimamia, Hodgs.

Himalayan wild goat, ENG. ; Kart of KULU.

Tehr, Tare, Tahir, HIND. ; Jharal of NEPAL.

Jhula (male), KANAWAR. ; Jehr of SIMLA.

Thar, tharni (fem.), Esbu, Esbi of SUTLEJ.

Kras ; Jagin, KASHM.

It is found throughout the whole of the Himalayas, generally in flocks, feeding on the grassy spots among the rocks. Length, 4 ft. 8 in. to root of tail; tail, 7 in.; height, 36 to 40 in.; horns 12 in. long, very thick at the base.

HEMP. *Cannabis sativa, Linn.*

Var. C. Indica.

Kinnub, ARAB. ; Kannabis (cannus), GR.

Ma, Lu-sung-ma, CHIN. ; Canape, IT.

Ta-ma, Ya-ma, Ganja, MALAY.

Hwang-ma, Bhang, Chang, PERS.

Hamp, DAN. ; Konope, POL.

Hinnep, Hinnup, DUT. ; Canamo, PORT., SP.

Kinnup, Konapli, Konopel, RUS.

Chanvre, FR. ; Bhang, Ganjika, SANSK.

Hanf, GER. ; Hampa, SW.

In the export commerce of India, hemp is a term applied to the fibres of several distinct plants, all valuable as cordage materials; and the Chinese terms, Ho-ma, Ta-ma, Ya-ma, and Hwang-ma, are fibres of urticaceous, malvaceous, and tiliaceous plants. But the true hemp of Europe is the fibre of the *Cannabis sativa* of botanists. It possesses a remarkably tough kind of woody tissue, capable of being manufactured into linen and cordage. It is an annual plant from 3 to 10 feet high, with the males and females on separate stems. It is difficult to say of what country the true hemp plant is a native,—Willdenow says Persia, Gmelin says Tartary, Thunberg found it in Japan; so that the varieties produced by climate have by some been thought to be distinct species, the European being called *C. sativa*, and the Indian *C. Indica*. Herodotus mentions it as a Scythian plant. Bieberstein met with it in Tauria and the Caucasian region. It is well known in Bokhara and Persia, and is grown everywhere throughout India, and in the Himalaya up to 10,000 feet. In European countries

HEMP.

it is cultivated only for its ligneous fibre, so extensively employed in the manufacture of ropes, and of coarse but strong kinds of cloth. It is cultivated in oriental countries to obtain the intoxicating leaves, called Ganja, from which bhang and suhji or sidhi are produced, and for the resinous product called charras. The mode of cultivating is, however, different for each of its products. The plant requires exposure to light and air, and is therefore sown thin or transplanted out, when it is cultivated for its resinous and intoxicating secretion; while the growth of fibre is promoted by shade and moisture, which are procured by thick sowing.

In Arabia, Egypt, and Turkey, the leaves used as an intoxicant are known as Hashish, and Hashish is a term of obloquy; the plural Hashasin has been supposed by some writers to be the source of the word Assassin. For its fibre it is chiefly grown in Russia, and is sent to the other European countries for cordage, canvas, and towelling. The finest quality of hemp, and that which brings the highest price, being sold at 50s. per cwt. when the best Russia brings only 47s., comes from Italy; though French, English, and Irish hems are much esteemed. The Russian hemp grows best in a friable soil of moderate richness. At St. Petersburg hemp is assorted into clean hemp, or firsts; outshot hemp, or seconds; half-cleaned hemp, or thirds; and hemp codilla. Riga hemp is classed as rein or clean, outshot, and pass hemp. Particular care is taken to ship hemp and flax in fine dry weather, and to preserve it from damp by packing with mats; for if either get wet, they are apt to heat, and to be totally spoiled.

The hemp imported into Great Britain from all countries, from 1877 to 1880, ranged from 1,204,036 to 1,320,731 cwt., of value from £1,684,377 to £2,072,040, almost all from Russia, Germany, Italy, and the Philippines; from India, between the years 1874-1879, the raw fibres exported under the commercial designation of hemp, in quantity and in value only ranged thus,—

	Cwt.	Rs.		Cwt.	Rs.
1874-5,	80,050	6,66,539	1877-8,	55,312	5,76,911
1875-6,	75,378	6,28,604	1878-9,	45,628	4,62,334
1876-7,	85,207	7,58,856	1879-80,	42,202	4,03,076

But during the same period the annual exports from India of coir, hemp, and jute averaged about 280,000 tons, value £3,500,000, the coir and hemp being valued about £20 a ton, and jute £12 the ton.

Sunn hemp (*Crotalaria juncea*), called also Brown hemp, Madras hemp, Indian hemp, Konkani hemp, Salsette hemp, Bombay hemp, Travancore flax, and by the vernacular names, Sana, Ghore-san, Sunn, Shanamoo, Kenna, Ambari, Taag, Wuckoo-nar, and Janapa-nar. It is the kind most generally cultivated all over India, on account of its fibre, and is that usually mentioned in the exports from Calcutta under the name of hemp, but also as sunn. The plant may be distinguished by its flowers being of a bright yellow colour, and of the form of the pea and of the laburnum, while the leaves are entire and lanceolate.

Ambari or Dekhani hemp (*Hibiscus cannabinus*), called in the languages of India, Mesta - pat, Nalkee, Pulooa, Sunni, Valaiti Sunn, Garnikura, Gongkura, Pooley-nammajii, Pundey, Pundrika, and Palungoo of Madras, is very generally cultivated all over India, and exported of very good quality from the west side. The fibre is like that

HENNA.

of jute. It is often confounded with that of the sunn, as it is one of the brown hems of Bombay, though the two plants differ much from each other.

Jubbulpur hemp is established as an article of commerce in India, and highly esteemed by good judges in Britain.

Manilla hemp is from the *Musa textilis*, grown in the Philippines, and introduced into S. India by Major (now Sir George) Balfour. It is being imported into Great Britain in increasing quantities and value.

1877, 332,304 cwt. £488,069	1879, 337,687 cwt. £434,037
1878, 421,160 „ 551,856	1880, 407,431 „ 622,776

A gigantic species of *Cannabis* hemp, growing from ten to fifteen feet in height, is in China a staple summer crop. This is chiefly used in making ropes and string of various sizes, such articles being in great demand for tracking the boats up rivers and in the canals of the country.

Jute is the fibre of *Corchorus capsularis*, and *C. olitorius*, and also known to the people as Pat, Koshta, Bhungee pat, Ghanalita pat, Putta, Singin-ganasha. It is now imported as jute, being largely used in Dundee.

Hemp seed and Oil, Ta-ma, Ho-ma-jin, Hwang-ma, CHIN. The small, shining, brittle achænia of the *Cannabis sativa*, are albuminous and oily, and entirely devoid of all narcotic properties. They are crushed for oil, the Ganja yennai, TAMIL, in many parts; in Russia, much used for burning in lamps.

HEMROO. HIND. A satin fabric of India, value two rupees the yard. See Kimkhab.

HENBANE SEED, *Hyosciamus niger*.

Bung, Buzir-ul-bung, AR.	Khorasani ajwain, HIND.
Sikran, Urmanikon, „	Adas, Adas pedas, MALAY.
Jusquiamo, Fr.	Khorasani omam, TAM.
Bilsenkrou, Ger.	

The seeds of the henbane plant have the odour of the plant, and an oily, bitter taste; an oil is obtained from them. See *Hyosciamus*.

HENDERSON, DR., a Bengal medical officer, who travelled in disguise as a Syud from Lodhiana in 1835, and passed by way of Mundi, Sanskar, or Lahul, to Ladakh and Iskardo, descending over the dangerous pass of Alunipilah, and by Burzel or Astor to Guryo and Kashmir. He again travelled to Dir and Bajwara, but was there plundered, and he returned to Lahore, where he died of fever in February 1836. He was the first projector of the Agra Bank.

HENERY, properly Ondari, one of the Bombay islets, 1½ miles due E. of Kenery Island, and surrounded by reefs. It is joined on the N. to Trombay and Salsette, as these are united to each other by bridges and embankments.

HENLE. In 1814 there was issued at Berlin the *Systembong der Plagiostomen* by Dr. Henle, which included several of the genera and species of the fishes of the seas in the S. and E. of Asia.

HENNA, HIND., PERS. is the leaf of the *Lawsonia alba*, Lam., the camphire of Scripture, the Yen-chi-kiah of China, and the Cyprus shrub of the Greeks and Romans. It is a fragrant plant when in flower. The fresh leaves, when beat up with catechu,

‘Imbus
The fingers' ends with a bright roseate hue,
So bright that in the mirror's depths they seem
Like tips of coral branches in the stream!’

This use of the leaves is as old as the era of the

HENSLOWIA PANICULATA.

Egyptian mummies, and is still followed by the Arabs, Persians, and people of British India, the last of whom know it as the mehudi. The leaves, beaten up into a soft mass with rice water, are applied to the nails, finger-ends, palms, and soles of the feet overnight; on being washed off the next morning, these parts are found stained a deep red colour. Men use it to stain their moustaches and beards, and for dyeing the manes and tails of their horses. In China, the leaves or flower of *Lawsonia alba*, of the *Impatiens balsamina*, and of the *Terustrenia Japonica* are mixed with lime or alum, and applied to stain the fingers, the mane, tail, and hoofs of horses, red. Chinese children, especially girls, often have a circular spot of rouge or henna placed between the eyes. It is also used as an ordinary dye-stuff. A decoction of the leaves is used in skin diseases, lepra, etc. The flowers when distilled are used as a perfume.—*Smith*.

HENSLOWIA PANICULATA. *Migu.* Anambo, BURM. A reddish-coloured wood of British Burma, used occasionally for cart wheels. The average length of the trunk to the first branch is 50 feet.—*Dr. Brandis, Cal. Cat. Ez., 1862.*

HENZA. BURM. A large golden figure of the sacred bird is in front of the throne of the king of Burma. The word is of Sanskrit origin,—*Hanza*, a goose. The Henza is regarded as the king of birds. It is perhaps a mysticized swan. Amongst the Burmese, the bayet, an emblem of nobility, is a pretty necklace of several strings or chains of filigree work joined together, and sewn with little figures, in red gold, of the Henza, which hangs low down on the breast.—*Yule's Embassy, p. 85.*

HENZADA, Myanounng, and Tharawaddy, three districts in the Pegu division of British Burma, with a population of about 500,000. The number of Burmese in the district in 1876 was greatly in excess of Talaiings. On the conquest of the lower country by Aloungbura (Alompra), every effort was made to destroy the Taluing nationality; and now it is said that scarcely any one of Taluing descent calls himself anything but a Burmese, so completely has the national spirit been extinguished.—*Imp. Gaz.*

HEPHAESTUS MULCIBER, or Vulcan, the analogue of Visvakarma.

HEPTAPLEURUM RACEMOSUM. *Wight.*
Hedera racemosa, W. Ic.

A large tree, common on the Neilgherries and Annamallays, etc., at elevations from 3000 to 7000 feet; grows also in Ceylon.—*Beddome, Fl. Sylv.*

HEIRA, a Babylonian goddess, the prototype of the Roman Juno and of the Egyptian Hora.

HERACLEUM, a genus of plants of which several species grow in the Himalaya; one of these, the padalli or poral, is collected for the winter fodder of goats, and is supposed to increase the milk. *Wight*, in *Icones*, gives *H. pedatum*.

HERAT is also called Heri; and the river on which it stands is called Hari-Rud. This river Hari is called by Ptolemy *Αρία*, by other writers *Arius*; and *Aria* was the name given to the country between Parthia (Parthawa) in the west, Margiana (Marghush) in the north, Bactria (Baktrish) and Arachosia (Haraowatish) in the east. It is the Haroya of the Vendidad, and is supposed to be the same as the Haraiva (Hariva) of the cuneiform inscriptions, though this is doubtful. The importance of its situation is very great, and it has always exercised considerable

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influence over the affairs of Central Asia, and has endured more than forty sieges in ancient and modern times. It is one of the most ancient and most renowned of the cities of Central Asia. It gave its name to an extensive province at the time of the expedition of Alexander, and is supposed by some to be Alexandria in Aria. Before the invasions of Chengiz Khan, the city could boast of 12,000 retail shops, 350 schools, 144,000 occupied houses, and 6000 baths, caravansaries, and water mills. It was for some time the capital of the empire which was transmitted by Timur to his sons. Under the mild and genial rule of his son, Shah Rukh Mirza, it recovered all it had lost. The restored prosperity continued till the beginning of the 16th century. Up to that period Herat was not only the richest city in Central Asia, but the resort of the greatest divines, philosophers, poets, and historians of the age. From the house of Timur it passed in the beginning of the 16th century to the Saffava dynasty of Persia, from whom it was taken by the Daurani in 1715. It was retaken by Nadir Shah in 1731, and it fell into the hands of Ahmad Shah in 1749. When the Daurani empire, created by Ahmad Shah, was lost by his grandsons, and parcelled out among the Barakzai brothers, Shah Kamran managed to maintain a precarious footing at Herat. He was the son of Mahmud, and therefore nephew of Zaman Shah, Shah Shuja-ul-Mulk, and Firoz-ud-Din, and the last remaining representative of the Saddozai princes in Afghanistan. Herat was all that remained to him of the empire of his family. Kamran was cruel and dissipated, and his minister, Yar Muhammad Khan, was even worse. Dost Muhammad was ruling at Kabul, and his half-brother, Kohun-dil Khan, ruled at Kandahar. Dost Muhammad was the son of Phound Khan, Barakzai. On the 23d November 1837, Muhammad Shah, king of Persia, laid siege to Herat, in pursuance of his ambitious policy for the reconquest of Afghanistan. It was on this occasion that Herat sustained a memorable ten months' siege, and all the efforts of the Persian king to capture it, aided by the advice and direction of Russian officers, were defeated, principally by the efforts of Lieutenant Pottinger, of the Bombay Artillery. Shah Kamran and his minister, however, continued intrigues with Persia, and the envoy, Major d'Arcy Todd, withdrew. On the occurrence of disasters in Kabul, Yar Muhammad was relieved of all apprehension of the interference of the British Government, and in 1842 strangled his sovereign, Shah Kamran, usurped the government of Herat, and professed himself a dependent of Persia. On his death in 1851, his son Syud Muhammad Khan succeeded him, only to be deposed in 1855, and succeeded by Muhammad Yusuf, grandson of Firoz, grand-nephew of Shah Zaman. Muhammad Yusuf was afterwards deposed, and Isa Khan succeeded; but under him Herat fell to the Persians, and he was murdered within a few weeks by a party of Persian soldiers. By the treaty of Paris, concluded between Britain and Persia on the 4th March 1857, the Persians were required to evacuate Herat. Before they withdrew, they installed Sultan Ahmed Khan, better known by the name of Sultan Jan, as ruler of Herat, and the British Government did not refuse to recognise him as *de facto* ruler. Shortly after,

Sultan Jan attacked and took Furrah, but the Amir of Kābul retook Furrah on the 29th June, and on 28th of July laid siege to Herat. After a siege of ten months, during which Sultan Jan died, the Amir Dost Muhammad took Herat by storm on 27th May 1863. He died eleven days afterwards, and was succeeded in the government of Kabul by his son, Sher Ali, who placed his own son, Muhammad Yakub, in charge of the captured city. Herat was thus again annexed to the Afghan dominions. Herat was visited by Mr. Forster in 1783, by Captain Christie in 1810, by Arthur Conolly in 1831, and by Eldred Pottinger in 1837. It is a city of great political importance; and in the strivings of the Persians and Afghans to obtain its possession, it has undergone great changes, but quickly recovers from the effects of war.

Herat is on the high road between India and Persia, the centre spot of an extensive and fertile valley, well watered by channels made from a perennial stream. The climate is the finest in Asia. There are two hot months in the year, but the thermometer even then rarely stands higher than 85 degrees (Fahrenheit) in the shade. The nights are always cool, often cold. The Heratis have a proverb, 'If the soil of Isfahan, the cool breezes of Herat, and the waters of Khwarizm were in the same place, there would be no such thing as death.' Herat is on the same level with the rest of the table-land of Western Afghanistan, and may be regarded as forming part of it, but it is just beyond the ridge which divides the waters that run to the south from those that flow northward to the Oxus. The winter is tolerably mild; on the plain the snow melts as it falls, and does not lie long even on the summits of the mountains.

The districts of Herat boast of extensive mines of iron and lead. The scimitars made at Herat are considered the best in Central Asia. The breed of Herati horses is scarcely less renowned; they are very cheap, and are exported in large numbers. Herat, too, is famous for its carpets, worked in silk and in wool, and in both combined, they are made of any size, and command large prices. Hitherto the difficulty in the way of transport has prevented their being so well known as they deserve. Silk is spun in large quantities in the districts. The districts likewise produce largely saffron, pistachio nuts, gum, and manna. These and horses constitute the principal exports. Of skins, only those of the sheep and the lamb are used in Herat. Sheepskins are made up into coverings. The people are Mongol, Paravian, Tajak, and Hazara.—*Bellew; Elphinst. India*, 629; *East Ind. Parl. Papers*, 133; *Treaties*, etc. vii. 165; *Müller's Lectures*, 234.

HERBA BENGALO. Mention is made in several old works relating to India, of cloths having been made of a plant called Herba Bengalo, which appears to be now unknown as a material of manufacture. Linschoten, who visited Bengal in 1599, is one of the earliest travellers who notice it (vide *Navigatio ac Itinerarium Johan. H. Linschotani*, A.D. 1599). Mandelso speaks of it as 'a certain herb having on the top of its stalk (which is about the compass of a man's thumb) a great button like a tassel: this tassel is spun out, and there are excellent stuffs made of it. The Portuguese call it Herba Bengalo, and make of it hangings and coverlets, in which they

represent all sorts of figures' (vide Mandelso's *Travels*, A.D. 1639, translated by J. Davies, book ii. p. 94). A similar description is given of it by the Abbé Guyon in his *History of the East Indies*:—'On trouve encore à Bengale une espèce singulière des toiles qui n'est ni fil ni coton, dont on fait des tapis et des couvertes. On les nomme simplement herbes. La tige de l'herbe, dont elles sont faites, a un pouce d'épaisseur et au haut une espèce de houppe qui contient une sorte de bourrée que les femmes du Paris filent, on prendroit ces étoffes heure de loiser: mais elles sont sujettes à se couper dans les plis' (vide *Histoire des Indes Orientales*, par M. l'Abbé Guyon, A.D. 1744, iii. p. 19). Fitch, about the year 1586, and Hamilton in 1744, both refer to it in their accounts of Orissa. The latter calls it Herba, a sort of tough grass of which they make 'ginghams, pinascos, and several other goods for exportation' (*New Account of the East Indies*, by Captain A. Hamilton, A.D. 1744, i. 393).

HERBELOT, D', author of the *Bibliothèque Orientale*, or the *Oriental Library*, was born at Paris, 4th December 1625. He was Oriental Secretary and Interpreter to the court. He began the work at first in Arabic, but afterwards continued it in French. He died at 70 years of age, before the work was printed; but it was continued by Antoine Galland, the translator of the *Arabian Nights Entertainments*. D'Herbelot understood critically the Latin, Greek, Hebrew, Chaldaic, Syriac, Arabic, Persian, and Turkish. It was history arranged alphabetically.—*Oriental Herald*.

HERBERT, CAPTAIN J. D., wrote on the *Mineral Productions of the Himalayas*, in *As. Res.*, 1833, viii., part 1, p. 216; *Course and Levels of the Sutlej*, *ibid.*, 1825, xv. p. 339; *Coal within the Indo-Gangetic Mountains*, *ibid.*, 1828, xvi. 397; *Gypsum in the Indo-Gangetic Mountains*, *ibid.*, 1833, xviii. part 1, p. 216; *Tour through Kumaon and Ghurwal*, in *Bl. As. Trans.*, 1844, xiii., part 2, p. 734; *Geological Map of Himalaya Survey*, *ibid.*, 1844, xiii. part 1, p. 171.—*Dr. Buist*.

HERBERT, SIR THOMAS, a cadet of the Pembroke family, who travelled as secretary to the English embassy to Persia from 1627–29. In his book, entitled *A Description of the Persian Monarchy now being, the Oriental Indies, Isles, and other parts of the Greater Asia, and Afrik*, was published in 1634. He contends that Prince Madoc ap Owen Gwynedd discovered America 300 years before Columbus. The third edition, 1665, contains a beautiful etching of Persepolis by Hollar.

HERCULES is supposed by Colonel Tod to represent Baldeva, a prince of Mathura, nephew of Koonti, the mother of the Pandua, and who, as in the days of Alexander, is still worshipped at Buldeo in Vrij, his club a ploughshare, and a lion's skin his covering. Megasthenes (iii. pp. 525–531) mentions the Indian tradition of Hercules as reigning in India fifteen generations after Dyonyssus; that he built Palibrotha and other cities; had numerous sons, to each of whom he left an Indian kingdom; and a daughter Pandæa, to whom he likewise bequeathed a realm. Bunsen, following Lassen, says he was chiefly worshipped in the Suras-Sen country, and identifies him with Krishna; says he founded Mathura. But there were many to whom this name was applied;

HERDSMEN.

Varro enumerates forty-four, Diodorus says three, and Cicero six. Hercules Belus of Cicero is supposed to be the Osiris who invaded up to the Indus.—*Tol. Rajas*. i. 30; *Buns*. iii. 525, iv. 210.

HERDSMEN in Central Asia, and south to the Arabian Sea, are a large mass of the populations of their respective regions,—many of them in Arabia, Persia, Afghanistan, Baluchistan, being purely nomades, dwelling in tents, and migrating with the seasons; others of them in British India camping out only in the dry season. Numbers of Ahir or Gopa in Central India and Western Bengal cling to the nomade life of their ancestors, but Sad'h Gop, or pure Gopa, are settling down to husbandry. The Gareri herdsmen founded the Holkar dynasty. In the S. of the Peninsula are the Dhangar, the Kurumbar, also shepherds, who were once dominant, but now only pasture great flocks of sheep. Amongst the Hindus of Bengal, the Goali are numerous; after them, the Brahman and Kaist races, are the Bagdi, an aboriginal people, and a class of cultivators called Kyurto. See Ahir; Dhangar; Gadaria; Gaola; Gopa; Kurumbra.

HERI, a name of Krishna, familiarly Kaniya, was of the celebrated tribe of Yadu, the founder of the fifty-six tribes who obtained the sovereignty of India, and descended from Yayat, the third son of Swayambhuva Manu, or the man, lord of the earth, whose daughter Ella (Terra) was espoused by Budha (Mercury), son of Chandra (the moon), whence the Yadu are styled Chandravansi, or children of the moon, the Lunar race.

The coincidence between the epithets of the Apollos of Greece and India, as applied to the sun, are striking. Heri, as Bhan-nath, the lord of beans, is Phoebus, and his heaven is Heripur (Heliopolis), or city of Heri. Helios, of Greece, was a title of Apollo, whence the Greeks had their Elysium; and the Heripur or Bhan-t'han (the abode of the sun) is the highest of the heavens of the Rajput. Hence the eagle (the emblem of Heri as the sun) was adopted by the western warrior as the symbol of victory.—*Tol's Rajasthan*, i. pp. 532-545.

HERI, a tribe of Mahomedan Rajputs, chiefly found in Jampur, a pargana of Moradabad.

HERI-RUD, written also Hari-Rud, a river of Afghanistan, which rises in lat. 34° 50' N., and long. 66° 20' E., at that point of the Koh-i-Bala range of mountains where it branches off into the Koh Siah and Safed Koh, at an elevation of 9500 feet. It flows west through Shahrek, Obek, and Herat. After leaving Herat, it flows through Persian territory, dividing into two branches, the smallest of which runs towards Mashad. Its plains are harried by Hazara and Turkoman. It is said to have formerly joined the Murghab. The united stream is ultimately lost in the desert of Khorasan. At Herat it was formerly crossed by a brick bridge.—*MacGregor*.

HERITIERA LITTORALIS. Ait., D. C.

Balanopteris tothila, Gert. | Ka-na-ro, . . . BURM.
Sundri, . . . BENG. | Kon-za-zo-loo, . . .

A species of the Sterculiaceæ. Grows in the Mauritius, the Peninsula of India, the Sunderbuns, is common in the Rangoon district, and along the sea-shores in the Morgui Archipelago and Amherst province. Its wood is used for boats, boxes, planks of houses, etc.; is very light, scented, durable, and tough.—*Roxb*. i. p. 142; *Voigt*; *M'Clelland*; *Captain Dance*,

HERMODACTYL.

HERITIERA MINOR. Lam.

H. fomes, Willde. | *Balanopteris minor*, Gertn.
Sundri, . . . BENG. | Ka-na-za, . . . BURM.

A gloomy-looking tree, distinguishable from all others many miles distant. Wherever the tides occasionally rise and inundate the land, this tree is sure to be found, throughout the whole Tenasserim coast, but is never found at home, either on the high, dry lands on the one hand, or in the wet mangrove swamps on the other. It grows in the Sunderbuns, is used in Calcutta for firewood, furnishes the sundri wood so well known in Bengal for its strength and durable qualities, and gives its name, as Captain Munro thinks, to the Sunderbuns. When seasoned, it floats in water, and is the toughest wood that has been tested in India. When Rangoon teak broke with a weight of 870 lbs., sundri sustained 1312 lbs.

It is used for boats, piles of bridges, boxes? and many other purposes. It is recommended for helms, but should be killed a twelvemonth before being cut down, or otherwise should be seasoned by keeping, after it has been cut down. Dr. Wallich says it stands unrivalled for elasticity, hardness, and durability. He adds that the charcoal made from it is better than any other sort for the manufacture of gunpowder.—*M'Clelland*, in *Records*, Foreign Dept. ix. p. 43; *Dr. Mason*; *Captain Dance*; *Voigt*.

HERITIERA PAPILIO. Beld. A very lofty evergreen tree, common in the dense moist forests above Courtallum (Tinnevely) at about 3000 feet elevation, also about Peernede (Travancore), 3500 feet; in flower in August and September; it yields a very valuable, tough timber.—*Beddome*, *Fl. Sylt.* p. 218.

HERIYA RAYAT, or chief rayat, also called Buddhavant, the wise, in Mysore; a person of importance, who takes the lead in all affairs of the community.

HERMANN, PAUL, a medical man who furnished the materials of the *Thesaurus Zeylanicus* of the elder Burmann, published in Holland, and afterward of the *Flora Zeylanica* of Linnaeus.—*H. et Th.* p. 46.

HERMES or Mercury, the analogue of Buddha. The worship of Hermes was established in Italy, Greece, Egypt, and Syria, and his ruined temple is 6 miles from Zahle, and a mile from Fursul.

HERMIPPUS, according to Pliny, translated the Zendavesta into Greek about the same time as the Septuagint translation of the Bible. Hermippus is supposed to have been the peripatetic philosopher, the pupil of Callimachus, and one of the most learned scholars of Alexandria.

HERMIT CRAB, the well-known Pagurus crustaceans that occupy the empty turbinated shells of testaceous molluscs. The fore part of the body is armed with claws, and covered with a shield, but it ends in a long, soft tail, provided with one or two small hooks. Some of them carry large shells to considerable heights and distances from the sea. The genus *Cænobita* inhabits the land; and in Kandavu, one of the Fiji group, they climb the hills and go far inland, bearing their shells with them.—*Hartwig*; *Moseley*, p. 304.

HERMODACTYL. Pei-mu, CHIN. This medicinal plant of the later Greeks and Arabs forms the sweet and bitter Surinjan of the Arabs, and both are supposed to be species of the genus

Colchicum. The Persian name of the sweet is Surinjan shirin, and Surinjan talkh is the bitter. In India, the Surinjan talkh, or bitter, and Surinjan shirin, or mild, are both identical with the Hermodactyls of the ancient Arabian and Greek writers. The tasteless variety is about one inch long and the same in breadth, heart-shaped, rather flattened, grooved at one side, convex at the other. They are not wrinkled, are easily broken, and form a white powder. The bitter kind is smaller, and has a striped appearance. In some trials which Dr. O'Shaughnessy made with an acetous tincture of the Surinjan talkh, he was led to believe it possessed all the virtues of the dried Colchicum of Europe.—*O'Sh.* p. 661; *Irvine*.

HERNANDI, a martial branch of the Koresch tribe of Mecca. Many of them in Syria are employed as irregular horse.

HERNANDIA PELTATA. *D. C.* Palati, SINGH. This is a large tree, common on the sea-coast in Ceylon between Galle and Colombo; also in Australia, and on the sea-coasts in the South Pacific and Eastern Archipelago, westward to the Mascarene Islands, and northward to the Philippines and Loo-Choo. Its wood is very light, and takes fire so readily from a flint and steel, that it might be used as tinder. The juice is a powerful depilatory, removing the hair without any pain; the bark, seed, and young leaves are cathartic.—*Beidome, Fl. Syl.* p. 300.

HERNANDIA SONORA. *Linn.* Bong-ko, JAVAN. A tall, erect tree of the Moluccas and the Fiji Islands; in the last, forming one of the sacred groves,—a complete bower. The genus was named after Hernandez, a naturalist sent out to Mexico by Philip II. of Spain, and obtained its name 'sonora' from the noise made by the wind in whistling through its persistent involuclae. The bark, the seed, and the young leaves are slightly cathartic. Rumphius says that the fibrous roots, chewed, and applied to wounds infected with the Macassar poison, act as an effectual cure. The juice of the leaves is employed as a depilatory. It destroys the hair wherever it is applied, and this without producing pain. The wood of this species is very light; and Aublet says it takes fire readily from a flint and steel, and may be used as tinder.—*Ains.*; *O'Sh.*; *Voigt*; *Seeman's Fiji*; *Eng. Cyc.*; *W. Ic.*; *Thur. Zeyl.* p. 258.

HERODOTUS, a Greek historian who travelled in Egypt and Persia, and visited Tyre, B.C. 460. He never gives us to understand that he was able to converse in any but his own language. He is called the father of history. He relates that, after Cyrus had conquered a large portion of Asia, his third successor, Darius Hystaspes, extended his conquests towards the Indian Peninsula.—*Bjornstjerna*, p. 93.

HERONS are classed by naturalists in the family Ardeidae, gen. Ardea, Ardeola, Herodias, Nycticorax. Those of the E. Indies are—

Ardea Goliath, *Tenn.*, the great heron.
A. Sumatrana, *Raffles*, the dusky grey heron.
A. cinerea, *Linn.*, the blue heron.
A. purpurea, *Linn.*, the purple heron.
Nycticorax griseus, *Linn.*, night heron.
Ardeola leucoptera, *Bodd.*, pond heron.
Butorides Javanica, *Ruf.*, little green heron.
Herodias alba, the Ardea alba, large egret, or great white heron of Europe, Asia, N. Africa, very rare in Britain, is very common in India, though the race is considered different by some.
H. bubulcus, the Ardea russata, or buff-backed heron

or egret of Europe, Asia, N. Africa, exceedingly rare in Britain, is very common in India.

- H. egretoides, *Tenn.*, the smaller egret, Patang-kabagla of India, Burma, and Malaya.
H. garzetta, the Ardea garzetta, or little egret of Europe, Asia, N. Africa, exceedingly rare in Britain, very common in India. Three specimens observed of an egret in winter dress seemed to differ only from ordinary Herodias garzetta in having black toes.

Hérons are plentiful in Kashmir, and a heronry is protected in the Shalimar Gardens. About 50 miles S.E. from Madras, and 12 miles from Chingleput, is a small village called Vaden Thangul, which means literally Hunter's Rest, from Vaden, hunter, and Thangul, rest. To the south of the village lies one of the small tanks called Thangul by the Tamil ryots, implying a water-rest or temporary reservoir, with an area of about 4½ acres (30 cawnies). From the N.E. to the centre of the bed of the tank there are some 500 or 600 trees of the Barringtonia racemosa, from about 10 to 15 feet in height, with circular, regular, moderate-sized crowns, and when the tank fills during the monsoons, the tops only of the trees are visible above the level of the water. This place forms the breeding resort of an immense number of water-fowl; herons, storks, cranes, ibises, cormorants, darters, paddy birds, etc., make it their rendezvous on these occasions. From about the middle of October to the middle of November, small flocks of 20 or 30 of some of these birds are to be seen, coming from the north to settle here during the breeding season. By the beginning of December they have all settled down; each tribe knows its appointed time, and arrives year after year with the utmost regularity, within a fortnight later or earlier, depending partly on the seasons. They immediately commence building their nests or repairing the old ones. When they have fully settled down, the scene becomes one of great interest. During the day the majority are out feeding, and towards evening the various birds begin to arrive in parties of 10, 15, or more; and in a short time every part of the crown is hidden by its noisy occupants, who fight and struggle with each other for perches. Each tree appears like a moving mass of black, white, and grey; the snowy white plumage of the egrets and curlews contrasting with, and relieved by, the glossy black of the water-crows and darters, and by the grey and black plumage of the storks. The nests lie side by side, touching each other, those of the different species arranged in groups of 5 or 6, or even as many as 10 or 20, on each tree. The nests are shallow, and vary in inside diameter from 6 to 8 inches, according to the size of the bird. The curlews do not build separate nests, but raise a large mound of twigs and sticks, shelved into terraces as it were, and each terrace forms a separate nest; thus eight or ten run into each other. The storks sometimes adopt a similar plan. The whole of the nests are built of sticks and twigs, interwoven to the height of 8 or 10 inches, with an outside diameter of 18 to 24 inches; the inside is slightly hollowed out, in some more and in others less, and lined with grass; reeds and quantities of leaves are laid on the nests. In January the callow young are to be seen in the nests. During this time the parent birds are constantly on the wing in search for food, now returning to their young loaded with the spoil,

and again going off in search of a further supply. About the end of January or early in February, the young are able to leave their nests and scramble into those of others. They begin to perch about the trees; and by the end of February or the beginning of March those that were hatched first are able to take wing and accompany their parents on expeditions; and a week or two later, in consequence of the drying up of the tanks in the vicinity, they begin to emigrate towards the north with their friends. Thus, in succession, the different birds leave the place, so that it is completely deserted by the middle of April, by which time the tank also becomes dry, and the village cattle graze in its bed, or shelter themselves under the trees from the scorching heat of the midday sun, while the cow-boys find amusement in pulling down the deserted nests. The villagers hold an agreement from the Nawab's ancient government, which continues in force by a renewal from the British Government, that no one is to shoot over the tank, and this is strictly enforced. When the tank becomes dry, the silt of its bed is taken up to the depth of a foot, and spread over the rice-field.

Dr. Shortt visited the trees on the 8th March 1864, on a raft pushed along by two fishermen swimming one on either side, their heads only visible above. As he got near the birds rose *en masse* overhead, and, uttering piercing cries, some, with threatening gestures, rested a moment on the adjoining trees, and then took to their wings again. Although so crowded, they performed their evolutions with the greatest nicety and dexterity, never interfering with each other's movements. Some ascended to a great height, and were hardly perceptible in the air, while others gyrated immediately above their heads; many crowded on adjoining trees, and witnessed the intrusion with dismay.

The small grey and black stork, *Leptoptilos Javanica*, *Horsf.*,—Tamil name, Nutha cootee narai; literally, shell-fish (Ampullaria) picking crane,—were the most numerous. Their nests were 2 feet in diameter, and contained three eggs or young. The eggs were of a dirty white colour, of the same shape, but not quite so large, as those of the turkey. The flesh is eaten by Mahomedans and Pariahs. The bird keeps entirely to marshy fields, edges of tanks, etc. Some half-dozen or more may often be seen in the morning sunning themselves with outstretched wings in the dry fields. They nest early, and the young are firm on the wing in the month of February.

The ibis or curlew, *Ibis falcinellus*,—Tamil, Arroova mooken; literally, sickle-nosed, which name they take from their long curved beaks. The nests of this bird contain from three to five eggs, resembling in size and shape a medium-sized hen's egg, but are of a dirty white colour. The birds are white, with black head, feet, and neck, and have a long curved black bill. The young are fully fledged in March, and take to the wing in April.

The grey heron, *Ardea cinerea*, *Linn.*,—Tamil, Narai, sometimes Pambou narai, or snake crane,—has a similar nest, built of twigs, containing sometimes two, sometimes three eggs. They are fledged from January to April, according to the time of depositing their eggs, which some do earlier than others. The eggs are of a light green colour;

they are not so large in circumference as a large-sized hen's egg, but are longer, with the small end sharp.

The purple heron, *Ardea purpurea*,—Tamil, Cumbly narai, or blanket crane. Nest the same; deposits two to three eggs, of same size and colour as last; seems to rear only two young. The young are fully fledged in April.

Nycticorax griseus, *Linn.*,—Tamil, Vukka. Nests are built after the same fashion, but smaller in size, and contain five eggs the size of a bantam's, and of the same shape. The young are fledged in April.

The cormorant, *Graculus Javanicus*, *Horsf.*,—Tamil, Neer cakai, or water-crow. Nest built of sticks; rears three or four young, which are fledged and on the wing in January; eggs like those of a small-sized bantam's, rather sharp-pointed at small end, with a slight greenish tinge.

The large cormorant, *Graculus Sincensis*,—Tamil, Peroon neer cakai, or large water-crow,—builds a very rude nest, chiefly formed of sticks; lays four eggs the size of a medium-sized hen's egg, and have a slight greenish tinge; the young are fledged sometimes in January, sometimes in March. These birds, as well as *G. pygmaeus*, are to be seen fishing in the tank itself; and the rapidity with which they find their prey, by diving, is wonderful.

The darter, *Plotus melanogaster*,—Tamil, Pambou thalai neer cakai, or snake-headed water-crow. Nest same as last; three, sometimes four, eggs of same size and colour; young fledged and on the wing, some in January, others not till April.

The villagers of Vaden Thangul told Dr. Shortt that the pelican sometimes breeds here, as also the black curlew. Occasionally different kinds of teal, widgeons, etc., are said to nest in the rushes that bound the inner surface of the tank bund. The egrets, or *Herodias garzetta*, *bubulcus*, and intermedia, were congregated in very large numbers, and roosted on the trees at night; but they do not nest, which seems singular, for of all the birds that assemble here, these occur in the greatest number. *Ardea alba*, or *Herodias alba*, and *H. intermedia* are also found here; and the natives say that they breed.—*Dr. Shortt, in Linn. Soc. Jo.*

HERPESTES. *Illiger*. Mongoose, *Mongoose*. *Ichneumon*, *Lacépède*. | *Mangusta*, *Olivier*.

The *Herpestes* is a genus of digitigrade carnivorous mammalia; and the Egyptian species, the *ichneumon*, has been noticed by writers from the earliest times, its combats with snakes and its alleged attacks on crocodiles having been mentioned by Aristotle, Diodorus Siculus, Pliny, Strabo, Ælian, and others. The mongoose of India and *ichneumon* of Egypt are frequently domesticated, and their search for snakes for food is continuous. Jerdon gives 12 species belonging to British India and the E. Archipelago, viz. *H. brachyurus*, *exilis*, *fuscus*, *griseus*, *Javanicus*, *Jerdoni*, *Malaccensis*, *monticolus*, *Nipalensis*, *Smithii*, and *vitticollis*, and retains as synonyms of other authors, *Auro-punctatus*, *Elliotti*, *nyula*, *pallidus*, *pallipes*, and *rubiginosus*.

Herpestes fuscus, *Waterhouse*, the Neilgherry brown mongoose, occurs in the Neilgherries.

Herpestes griseus, *Geoff.*, Madras mongoose.

<i>H. pallidus</i> , <i>Schinz.</i>	<i>Mangusta mungos</i> , <i>Elliot</i> .
Mungli, CAN.	Newul, Newara
Koral, GOND.	nyul, HIND.
Mangus, . HIND., MAHR.	Yentawa, TEL.

Northern India, intermediate between rabi and kharif, including bajra and juar. Hemanta in Bengal is a rice crop growing in the months Agrahayana and Pausha (November—December), ripening in December.

HEYNE, BENJAMIN, M.D., a Madras medical officer, author of *Mode of Manufacturing Catechu*, Bl. As. Trans. vii. p. 108; *Travels in India*, ibid.; *On Copper at Nellore*, ibid.; *Tracts, Historical and Statistical, on India, with an Account of Sumatra*, London 1814.

HEYNEA AFFINIS. *Juss. H. trijuga, Roxb.* This is a very ornamental middling-sized tree of Nepal, common in many localities on the western mountains of the Madras Presidency, from 2000 feet upwards; at Conoor, 6000 feet, abundant; Bolampatty valley, 3000 feet, very abundant. *H. quinquejuga, R.*, is a native of the Moluccas, with the perfect habit of a *Melia*.—*Roxb.; Bedd.*

HI'AVIRA-PATI, i.e. resolute prince, also styled Shora-pati, lord of the oxen, a ruler who opposed Semiramis and drove her back across the Indus. The whole country on the right bank of the Upper Indus, the site of the present Peshawur, opposite Attok (Taxila) and still higher up, was tributary to the Assyrians, as it afterwards was to the Medes and Persians. Pliny tells us that Semiramis capitulated here, on the Kophen (the Kabul river, the Kubha of the Rig Veda); and on the black obelisk from Nineveh in the British Museum, which is at least of the 9th century B.C., the Bactrian camel is found side by side with the Indian rhinoceros and Indian elephant. According to Diodorus (ii. 16–19), Semiramis fitted out an armament in Bactria, and between B.C. 1235 and 1225 she crossed the Indus with a vast force. At first she drove back the opposing maharaja from the strong position that he had taken up with a vast force, especially of archers; but, rallying his retreating forces, he soon drove back the Assyrians in total disorder to the river, which they had great difficulty of crossing, and only after immense loss. Semiramis concluded an armistice, made an exchange of prisoners, and retreated into Bactria with a third of the army which she had brought against India. At that time there must have been a supreme ruler in India, a sami raja, with a capital in the district to the south of the Saraswati, in the Jumna and Ganges Doab.—*Bunsen*, iii. 549.

HIA, the first Chinese dynasty, descendants of Yu, from B.C. 1991 to 1659, ruled 432 years. Its first emperor was Yu, beginning B.C. 1991.

HIATILLA, or the White Huns, a Tartar tribe who issued from the plains near the north wall of China, and made themselves masters of the country of Transoxiana. Some years afterwards, Turkish tribes expelled the Hiattilla from the lands that they had taken from the Saca or Scythians. There is every ground to conclude that it was an army of the Hiattilla that invaded Persia in the reign of Bahram-Gor, and that it was to one of their kings that Firoz fled.—*Malcolm's Persia*.

HIBAVINIA OIL. CANARESE. Under this name there was exhibited at the Madras Exhibition of 1857 a solid oil from the Sanjajey district, of a clove-brown colour. A small phial priced at 4½ rupees.

HIBISCUS, a genus of plants belonging to the Malvaceae or mallow tribe; above 30 species of the genus are known in the E. Indies. Several furnish useful commercial products, and most of the

Indian species might be employed for the same purposes as hemp, as the bark is tough, and may almost always be stripped off in long slips.

Hibiscus collinus, Roxb. (*Eriocarpus* of *D. C.*), a native of the mountainous parts of the Northern Circars and of Peninsular India, where it is called Kanda-gang, and where the natives use the bark as a substitute for hemp. Dr. Roxburgh states that there are three varieties of this plant, the double red, double yellow, and double flesh red.

Hibiscus ficifolius, Roxb. In the Moluccas, an annual, growing straight, very tall, often 12 to 14 feet high, with few branches. The fibres described as uncommonly beautiful, and rather stronger than the sunn fibre.

Hibiscus furcatus, Roxb., W. and A.

H. bifurcatus, Roxb. | H. aculeatus, Roxb.

Konda gongura, Tel.

A very prickly plant, growing in India to a height of from 6 to 8 feet. It yields abundance of strong, white, flaxy fibres, but from the prickliness of the plant it is very troublesome to handle. The stems are cut when in flower, and steeped immediately.—*Roxb.; W. and A.*

Hibiscus punctatus, Dalz., Gibson, an annual fibrous plant of Sind and Multan.—*Von Mueller*.

Hibiscus vesicarius, CAV., a plant of the Peninsula. Good samples of its fibre were exhibited as wild Ambari at the Madras Exhibition of 1855.

HIBISCUS CANNABINUS, *L.*, Dekhani hemp.

Kudram of . . . BEHAR.	Ambari DUKH.
Mesta pat, Nalki, . . . BENG.	Sankokla patsan, . . . PANJ.
Punday, Pundria, . . . CAN.	Vutsan, Sunni of . . . "
Hiang-ma, . . . CHIN.	Palango, TAM.
Peh-ma, Ye-ma, . . . "	Pulachia, "
Pula namaji, . . . COINB.	Ghongu kuru, . . . TEL.

Hibiscus cannabinus is an erect growing plant, to about 4 to 6 feet. It is slightly prickly over the stem. There is a dark, purplish-coloured species. Both are grown all over India for the acidulous leaves, and also for the fibres of its bark, called one of the hems of India, which are used as cordage; the cultivators sow a small quantity along the edges of the usual crops for their own use. In the beginning of the rains, and when it commences to flower, it is cut and treated exactly as the sunn hemp from *Crotalaria juncea*. The proportion of fibre is about half the weight of the plant. It is used for making rope, sackcloth, twine, paper, etc. The price of the prepared fibre is from 3 to 4 rupees per maund, according to its strength, length, and cleanliness. The fibre, like that of jute, is sometimes called Pāt; also, in Bombay, Dekhani hemp, to distinguish it from Taag or Konkani hemp; also Indian hemp. Also, it is one of the brown hems of Bombay, and is often confounded with the fibre of sunn, though the two plants greatly differ,—the sunn, *Crotalaria juncea*, being known in Bombay as Taag. The length of the fibres of carefully cultivated Ambari is from 5 to 6 feet; they are of a paler brown than ordinary brown hemp of the *Crotalaria juncea*, harsher in feel, and stick more together; but they are divisible into fine fibrils, possessed of considerable strength, well calculated for rope making, as also for coarse fabrics. Though esteemed by some of the natives of Western India, the hemp of the *H. cannabinus* is not, either in strength or durability, so good as the true hemp of Europe, or as the sunn or brown

HIBISCUS MUTABILIS.

hemp of the *Crotalaria juncea*. The strength of this fibre was tested by several scientific men, and breaking weight found to be—

Experiments of	<i>H. cannabinus.</i>	<i>Crotalaria juncea.</i>
Dr. Roxburgh, . . .	110-115 lbs.	130-160 lbs.
Dr. Royle, . . .	150 "	190 "
Dr. Wight, . . .	290 "	404 "

The exports of this fibre are not distinguished from other hems. An excellent substitute for tow might be profitably supplied from it. The rope made of the fibre is used in the Karnatic as a substitute for the jute of Bengal, the produce of *Corchorus capsularis*, a plant comparatively unknown in the Peninsula. Dr. Riddell strongly recommended this fibre as a paper material.—*M. Ex. Jur. Rep.*; *Royle*; *Roxb.*; *Voigt*; *Stewart*.

HIBISCUS MUTABILIS. L.

Thalpadmo, . . .	BENG.	Gul-i-ajab, . . .	HIND.
Fu-yung, Mu-fu-yung, Chi.			

The changeable rose is a large shrub, native of China, remarkable for the changes which occur in the colour of its flowers, bearing white flowers in the morning, but changing in the course of the day, and in the evening to red; easily propagated by cuttings. The flowers and leaves are used in China medicinally, and its fibre is there made into cloth.—*Drs. Roxb.*, *Riddell*, *Mason*, *Stewart*.

HIBISCUS ROSA-SINENSIS. L. Shoe-flower.

Uru, Joba, Juva, . . .	BENG.	Jaba, . . .	SANHK.
Chu-kin, Fuh-sang, CHIN.		Supata cherri, . . .	TAM.
Fu-sang, Liu-hwa, . . .		Dasana japa push-	
Jaun, . . .	HIND.	pamu, . . .	TEL.
Shem pariti, . . .	MALEAL.	Jova pushpamu, . . .	"
Kambang saptu, . . .	"		

This plant is common in India; the leaves are used as emollients, anodyne, and gentle aperients; the flowers are deep scarlet, and yield a very mucilaginous juice, which turns rapidly to a dark purple. Applied to soft, unsized white paper, this colour is nearly as sensitive a test for acid as the celebrated litmus. Shoe flowers are sometimes employed for dyeing lilac colour, but it does not appear to be a permanent dye; they are also occasionally rubbed on leather for the purpose of blackening and polishing. The natives make pickles of the flowers, and they are used for giving a red tinge to spirituous liquors. The petals furnish a black liquid to dye the eyebrows.—*Roxb.* iii. p. 194.

HIBISCUS SABDARIFFA. L. Roselle.

Meata, . . .	BENG.	Patwa, . . .	PANJ.
Tham-bau-khyen-		Pulychay kire, . . .	TAM.
boung, . . .	BURM.	Shimay kashli kire, . . .	"
Oseille, . . .	MAURITIUM.	Yerra gogu, . . .	TEL.

There are five varieties, cultivated in most gardens for the calyces, which, as they ripen, become fleshy, are of a pleasantly acid taste, and are much employed for making palatable tarts, as well as an excellent jelly. The stem, if cut when in flower, and the bark stripped off and steeped immediately, displays a mass of fibres of a fine silky nature. The leaves are used as greens, alone or mixed with others; often cultivated in flower-beds for its very pretty flowers. In the French West India Islands, a kind of cider or wine is prepared from it, termed Vin de oseille.—*Ains.*; *Roxb.*; *Von Mueller*.

HIBISCUS STRICTUS. Roxb. A native of the Rajmahal Hills, with a straight stem of from 6 to 14 feet in height, and a very smooth bark. It is in blossom about the termination of the rains, and the seed ripens in December and

HIDES.

January, soon after which the plants perish. The bark abounds in flaxen fibres, beautiful, long, glossy, white, fine, and strong. Sow in the beginning of the rains in beds, and when about six inches high transplant out in rows about nine inches asunder, and about as much from each other in the rows. In 1801, 40 square yards planted in this manner yielded 33 pounds weight of very clean fibres. Dr. Roxburgh's original specimens are 9 and 10 feet in length, a fibrous mass apparently easily stripped off, and composed of fine and easily divisible fibres.—*Roxb.*; *Royle*.

HIBISCUS SURATTENSIS. Linn., Roxb.

Kashlikire, . . . TAM. | **Mulu gogu, . . . TEL.**
A herbaceous plant, with speckled prickly stems, and yellow flowers; the leaves are used as greens.—*Roxb.*; *Jaffrey*.

HIBISCUS SYRIACUS. Linn.

Muh-kin, . . . CHIN. | **Oodha godhul, . . . HIND.**
There are four varieties of this plant cultivated for ornament in India, two purple, a single and a double; and two white, a single and a double. The flowers are used to blacken the eyebrows and shoe leather. It is a common hedge plant of Hupeh in China.—*Roxb.* iii. p. 195.

HICK. SINGH. A Ceylon wood, very hard, fine, close, very uniformly grained; heavy, in colour resembling pencil cedar.

HIDES.

Hud, . . .	DAN., SW.	Balulang, Kulit, . . .	MALAY.
Huiden, . . .	DUT.	Pelles, . . .	PORT.
Paux, . . .	FR.	Koshi, . . .	RUS.
Haute, . . .	GER.	Charma, . . .	SANSK.
Chamra, . . .	HIND.	Pellejos, Ficles, . . .	SP.
Cuoja, Pelle, . . .	IT.	Toll, Tolu, . . .	TAM., TEL.
Pellis, . . .	LAT.	Deri, . . .	TURK.

Hides and skins, raw, dressed, and tanned, form a large item of the exports from India, and since the year 1851 the quantities and values exported have largely increased, while amongst the millions of India they are largely used. In every part of S. India extensive tanneries have been established, chiefly by the Labhai Mahomedans. The value of the exports from India have been as under, for hides and skins, raw and dressed:—

1851-52, . . .	£303,089	1860 61, . . .	£656,629
1852-53, . . .	337,849	1874-75, . . .	2,677,765
1853-54, . . .	402,365	1875-76, . . .	2,943,573
1854-55, . . .	402,386	1876-77, . . .	2,991,022
1855-56, . . .	431,729	1877-78, . . .	3,756,887
1856-57, . . .	572,530	1878-79, . . .	3,186,845
1857-58, . . .	639,702	1879 80, . . .	3,733,005
1858-59, . . .	544,680	1880-81, . . .	3,733,565
1859-60, . . .	444,537	1881-82, . . .	3,948,792

About the year 1850, nearly 40,000 tons of leather, hides, and skins were annually imported into Britain; the total imports into Great Britain of hides and skins, in 1880, was 83,397 tons, value £6,910,847.

All untanned leather is classed under the denominations of hides, kips, and skins. From these there are various kinds of leather tanned. Butts and backs are selected from the stoutest and heaviest ox hides. The butt is formed by cutting off the skin of the head for glue, also the cheeks, the shoulder, and a strip of the belly on each side. In the back, the cheeks and belly are cut off, but the shoulder is retained. The butt or back of the ox hide forms the stoutest and heaviest leather, such as is used for the soles of boots and shoes, for most parts of harness and saddlery, for leather trunks and buckets, hose

for fire-engines, pump-valves, soldiers' belts, and gloves for cavalry. Hides consist of cow hides, or the lighter ox hides and buffalo hides; they are the same as butts with the bellies on. Hides are sometimes tanned whole, and are struck for sole leather, in which case they are called crop hides. Skins are used for all the lighter kinds of leather.

Bull hide is thicker, stronger, and coarser in its grain than cow hide. The hide of the bullock is intermediate between the two.

Calf-skin is thinner than cow's. It is tanned for the bookbinder, and tanned and curried for the upper part of shoes and boots.

Sheep-skins are tanned and employed for book-binding, leathering for common bellows, whiplashes, bags, aprons, etc.; also for the cheaper kinds of wash-leather for breeches, gloves, and under-waistcoats; and are also coloured and dyed leathers and mock morocco, used for women's shoes, for covering writing-tables, stools, chairs, and sofas, lining carriages, etc.

Lamb-skins are dressed white or coloured, for gloves; are very extensively used with the hair on in the N.W. Himalaya, Afghanistan, Hazara, Kafiristan, Tartary, Tibet, China, and Persia, as articles of dress for the head, and for mantles.

Goat-skins form the best dyed morocco of all colours. Kid-skins supply the finest white and coloured leather for gloves and ladies' shoes.

Deer-skins are all shamoyed, or dressed in oil, chiefly for riding breeches. Shamoyed leather of sheep, goat, and deer-skins was formerly a lucrative branch of the leather trade, for breeches, white or dyed.

Horse hide is tanned and curried for harness work, for collars, etc. Enamelled horse hide, split or shaved thin, is used for ladies' shoes, in imitation of seal, but does not produce so good a leather as seal.

Dog-skin is thin, but tough, and makes good leather. Most of the dog-skin gloves are really made of lamb-skin.

Seal-skin makes a valuable leather, but a large proportion of seal-skins is used as fur.

Hog-skin affords a thin, porous leather, which is used for covering the seats of saddles.

Iguana skins can be tanned and dyed black, or left of their natural colour. They are thin, even, soft, tough, elastic, and granular or shagreen-like in external appearance. It bids fair to be a durable article for light slippers, and a good covering for the commoner kinds of instrument boxes, such as are still done over with shagreen. Python skin, when tanned, makes excellent boots, much prized for their strength, pliability, and great beauty, as they are handsomely marked. The skins of young alligators are tanned, converted into leather, and the leather manufactured into boots.

Wash-leather skins are prepared with oil, in imitation of chamois, for household purposes, such as cleaning plate, brasses, and harness.

Leather is made from the skin of salmon and other fish.

HIDIMBA, a wife of Bhima. Her brother was a cannibal, and was killed by Bhima.

HIERONIMO DI SANTO STEFANO, a Genoese; visited India about 1494-99 as a merchant adventurer. At Cairo he laid in a stock of coral beads and other wares, and passed down the

Nile to Cane (Keneh), from which he travelled by land through the Egyptian desert for 7 days to Cosir (Conseir) on the Red Sea, where he embarked on board a ship, which in 25 days carried him to Mazua (Massouah) 'off the country of Prester John'; and in 25 days more, during which he saw plenty of boats fishing for pearls, to Aden (Aden); and in 35 days more to Calicut. 'We found that pepper and ginger grew here, . . . and the nut of India' (cocoanuts). From Calicut he sailed in another ship, and in 26 days reached Ceylon, 'in which grow cinnamon trees, . . . many precious stones, such as garnets, jacinths, cats'-eyes, and other gems, . . . and trees of the sort which bears the nut of India.' Departing thence, after 12 days he arrived at a port on the coast of Coromandel, 'where the red sandal-wood grows'; and, after a long stay, departing thence in another ship, after 27 days reached Pegu in Lower India. 'This country (Pegu) is distant 15 days' journey by land from another, called Ava, in which grow rubies and many other precious stones.' From Pegu, where he suffered many and great troubles, he set sail to go to Malacca, and, after being at sea 25 days, one morning found himself in a port of Sumatra, 'where grows pepper in considerable quantities, silk, long pepper, benzoin, white sandal-wood, and many other articles.' After further and greater troubles suffered here, he took ship to Cambay, where, after 6 months' detention among the Maldives, and subsequent shipwreck, he at length arrived, but stripped of all his goods. He notices that Cambay produced lac and indigo. In his destitution he was assisted by a Moorish merchant of Alexandria and Damascus, and after a time proceeded in ship of a sharif of Damascus as supercargo to Ormuz, in sailing to which place from Cambay he was 60 days at sea. From Ormuz, 'in company with some Armenian and Azami (Irak-Ajemi) merchants,' he travelled by land to Shiraz, Isfahan, Kazan, Sultanieh, and to Tauris; whence he went on with a caravan, which was plundered by the way, to Aleppo, and finally to Tripoli.—*India in the 15th Century; Birdwood's India Office Records.*

HIE-SHAN, a group of three islands and eight rocks on the east coast of China, which extend 4 miles long. The southernmost is the largest, and the inhabitants are fishermen.

HIGH PLACES. Sacred edifices were often erected by the Hebrews, Greeks, and Romans upon elevated sites. The custom is of very high antiquity. Hector, according to Homer, sacrificed upon the top of Ida. Abraham was commanded to offer up Isaac on Mount Moriah; and Balak is represented as selecting three elevated stations, where he sacrificed with Balaam.—

First station.—Numbers xxii. 41: 'And brought him up into the high places of Baal.' 'And he led him to the high places of his god' (Chaldee and Samaritan). 'And he made him ascend Bemoth Baal' (Syriac). 'He made him ascend to the pillar or mound of Baal' (Greek). 'And he led him up to some temples of his god' (Arabic).

Second station.—Numbers xxiii. 14: 'And he brought him into the field of Zophim, to the top of Pisgah.' 'To the field of observation, to the top of the hill' (Chaldee). 'To the field of the watchers, to the top of the hill' (Syriac). 'To the field of the watchers, to the peak of observation' (Samaritan). 'To the field of observation.

on the summit of a levelled place' (Greek). 'To an high place, on the top of a citadel' (Arabic).

Third station.—Numbers xxiii. 28: 'And Balak brought Balaam unto the top of Peor.'

Numerous Hindu temples are erected on the summits and slopes of mountains, notably at Triputty and Srirangam, in the Madras Presidency.—*Archæologia; Milner's Seven Churches.*

HI-HYA, a tribe of the Lunar race, brave and valorous; their remnants exist in the line of the Nerbadda at the very top of the valley of Sohagpur in Baghelcund. See *Sehestra; Arjuna; Ha-Haya.*

HIJILI, a small marshy district on the western side of the mouth of the Hoogly river. It is the sea-coast division of the Midnapur district of Bengal; a considerable quantity of salt is now produced by private persons under Government supervision.—*Imp. Gaz.*

HIJRAH. ARAB. A flight, but applied as relating to the flights of the disciples of Mahomed, and of Mahomed's own flight, to escape persecution. The first flight consisted of 15 disciples of Mahomed, who, at his recommendation, to avoid persecution, took refuge in Abyssinia. The Koreah wished them to be delivered up, but the Nagashy of Abyssinia refused. The second flight is that most generally known, and has given rise to the Mahomedan era of the Hijrah. It was the flight of Mahomed to Medina, which took place on the night of Thursday the 12th July, A.D. 622. In the khalifat of Omar, this was constituted the commencement of the Mahomedan era.

The Mahomedan Hijrah year consists of twelve lunar months, each of 29 days 12 hours and 44 minutes; and the year, 354 days 8 hours and 48 minutes.

The months of the Mahomedan year,—

Maharram, . . .	30 days.	Shaban, . . .	29 days.
Safar, . . .	29 "	Ramazan, . . .	30 "
Rabi-ul-Awal, . .	30 "	Shawal, . . .	29 "
Rabi-us-Sani, . .	29 "	Zilkada or Zul-	30 "
Jamadi-ul-Awal, .	30 "	kada, . . .	30 "
Jamadi-us-Sani, .	29 "	Zilhijja or Zul-	30 "
Rajab, . . .	30 "	hijja, . . .	29 "

The corresponding years of the Christian and Hijrah eras may easily be calculated by the following formula,—it being remembered that the Christian are solar and those of the Hijrah lunar years, and that 521 solar are equal to 537 lunar years:

Ex.—What is the year of Christ 1734, according to the Hijrah?

From 1734 A.D. subtract 621, the difference of the two eras; result, 1113 of the Hijrah in solar years.

Then, 521 : 537 : : 1113 : 1147 Hijrah.—*Pleyfair's Yemen.*

HILLAH, a town 54 miles from Baghdad, on the site of the ancient Babylon; about two-thirds of it is on the right bank of the Euphrates and the remainder on the left bank, the two parts being connected by a bridge of 28 boats, and 450 feet in length. It is inhabited by Arabs, Persians, Turks, and Jews. It has numerous gardens. Basket boats ply at the ferry.

Hillah lies in lat. 32° 31' 18" N. and W. of Baghdad. According to Turkish authorities, it was built in the fifth century of the Hijra, in the district of the Euphrates which the Arabs call El-arad-Babel, lying on a spot of the west site of Babylon. The ruins near Hillah are still by the Arabs designated Babel, and all historical records as well as traditions agree in representing these

as the remains of the first city of Nimrud, the Babylon of Herodotus, Diodorus Siculus, and other historians.—*MacGregor.*

HILL STATES is a term by which the British designate several independent and feudatory kingdoms in the Himalayas. Nepal is the largest of these; it is independent, but has treaties with British India.

Sirmur or Nahau.—In recognition of the services rendered by raja Shamsher Purgass during the 1857 mutiny, he received a khillat of Rs. 5000, and a salute of 7 guns. The family is Rajput. Revenue of Sirmur, a lakh of rupees a year. The raja maintains a small force of drilled sepoys, numbering 250 men. Population, 75,596. The raja pays no tribute, but is bound to render feudal service. Gross revenue, Rs. 2,10,000.

The *Kahlur or Bilaspur* raja had estates on both sides of the Sutlej, but the sunnud given to raja Moohar Chand in 1815 confirmed to him the eastern portion only. The family is Rajput. In acknowledgment of his services during the mutinies of 1857, the raja received a dress of honour of Rs. 5000 value, and a salute of 7 guns. Revenue, Rs. 1,00,000; population, 66,848.

The *Hindur or Nalagarh* chief belongs to a Rajput family. A sunnud was granted in 1815. Population, 60,000; revenue, Rs. 90,000.

Bashahr, a tributary state, gave Rs. 3945 as tribute. *Rawaun*, on the left bank of the Pabur, was transferred to Keonthal. The thakuri of Kotgurh and Kumharsain were declared independent of Bashahr. The raja is of a Rajput family. Population (1872), 90,000; revenue, Rs. 70,000.

Keonthal.—After the Gurkha war, a portion of the territory of Keonthal was sold to the maharaja of Patiala. The chief claims a Rajput origin. He is bound to render feudal service. In 1858 the chief was created a raja, and received a dress of honour worth Rs. 1000 for his services during the mutinies. Revenue, Rs. 60,000, and population (1875), 50,000.

The *Baghal* family is Rajput. Revenue, Rs. 60,000; population, 22,805.

Jubbul.—Originally this Rajput state was tributary to Sirmur, but after the Gurkha war it was made independent, and the rana received a sunnud from Lord Moira on 18th November 1815. Revenue, Rs. 80,000; population, 40,000 souls. The rana pays Rs. 2520 tribute, and is bound to render feudal service.

Bhaji pays tribute, Rs. 1440. Revenue, Rs. 23,000; population, 19,000.

Kumharsain state, formerly a feudatory of Bashahr, was declared independent at the Nepal war; pays Rs. 2000 as tribute. Revenue, Rs. 10,000; population, 10,000. The family is Rajput, of not very high pretensions.

The *Kuthar* sunnud bears date the 3d September 1815, and confirms to rana Bhoop Singh and his heirs the hereditary possessions of his ancestors, subject to the performance of feudal service, and supplying a contingent of 40 begar, but subsequently commuted to a tributary payment of Rs. 1080. Revenue, Rs. 5000; population, 8990. The family is Rajput.

Dhamsi.—This old Rajput state became independent of Kahlur after the Gurkha war. The state was bound to supply 40 begar, but this was commuted to a tribute of Rs. 720. Revenue, Rs. 8000; population (1875), 5500.

HILL TRACTS.

Baghat, a hill state, the chief of which acted unfriendly during the Nepal war. He died without issue on 11th July 1839. The state was treated as a lapse, and pensions to the extent of Rs. 1282 were assigned to the family. Gazetteer says population, 10,000; revenue, Rs. 8000.

Balsan.—This state was originally a feudatory of Sirmur, but a separate sunnud was granted to it in September 1815. Its tribute payment is Rs. 1080. Its chief is of Rajput origin. Thakur Joganj was created a rana in 1858 for services rendered during the mutiny. Revenue, Rs. 6000; population, 4892.

Mailog.—The sunnud of this Rajput state is dated 4th September 1815. The tribute is Rs. 1450. Revenue, Rs. 9000; population, 1000.

Bija.—This petty state pays a tribute of Rs. 180. Revenue, Rs. 1000; population, 981.

Taroeh.—Revenue, Rs. 6000; pop. 6000. It pays Rs. 280 in lieu of begar.

Kunkhar state pays Rs. 180 in lieu of begar. Revenue, Rs. 4000; population, 2500.

Mangal was an ancient dependency of Kahlur, but was declared independent on the expulsion of the Gurkha. Its tribute payment is Rs. 72. Revenue, Rs. 700; population, 917.

Darkuti.—This petty chieftainship pays allegiance to the British Government, and is exempted from all pecuniary liability. Revenue, Rs. 600; population, 700.

In 1847 transit duties were abolished throughout these states. A yearly sum of Rs. 13,735 is paid in compensation by British India. To all the hill chiefs the right of adoption has been granted. —*Aitcheson, Treaties, etc.* p. 323.

HILL TRACTS of Arakan, or N.E. Arakan, are regarded as a revenue district, extending N.E. to Independent Burma and to Manipur, with an area of 4000 or 5000 square miles, and a population of 12,442 souls. The country, wild and beautiful, consists of parallel ridges of sandstone, clothed with dense forests; its chief river the Kuladan (Kolady) or Yam Pang. The tribes are the—

Ra-Khaing or Khyoung-tha, or sons of the river; profess Buddhism, and have paper books.

Shandu are polygamic, and bury their dead.

Kha-mi, meaning man, homo, or Khwe-myi, meaning dog's tail, their dress hanging down behind like a tail. They trade.

Mro, 2162, live on the Mi, Anu, or Khoung-tao, dwell on the banks of the Tsala river.

Khyeng inhabit the Arakan Yoma Hills, E. of the Le-Mru; they are shy, and tattoo their women's faces.

Khyaw, in a village on the Tsala river, are a Kuki clan. They speak different dialects of the Arakanese and Kha-mi, but have many religious beliefs, domestic customs, and laws in common. Twice annually they worship the spirits of the dead, Ka-nie-hpa-law. Chastity before marriage is not required, and crimes are punished by fines.

HILL TRIBES is a general term by which the British designate collectively the numerous uncivilised tribes who inhabit the mountain ranges and higher hills in British India and along its borders. Most of them are wholly illiterate. Dr. W. W. Hunter has mentioned that—

In the North-West Provinces there are wandering and wild tribes, named Bur, Damak, Kanjar, Pasi, Kumbho, Nat, Saunsee, Gond, and the Tharoo in the Terai; the Pasi also occurring in Oudh.

HILL TROUT.

The Chinese Frontier and Tibet have the Gyami, Gyaring, Takpa, Manyak, Thochu, Sokpa, Horpa.

Nepal (East to West) has the Serpa, Sunwar, Gurung, Murmi, Magar, Khakaya, Pakhya, Newar, Limbu.

Kiranti Group, East Nepal, have the Kiranti, Rodong, Rungchenbung, Chingtangya, Nachhereng, Waling, Yakha, Chourasya, Kulungya, Thulungya, Babingya, Lohorong, Limbichlong, Balali, Sang-pang, Dumi, Khaling, Dungmali.

The Broken Tribes of Nepal are the Darhi, Denwar, Pahri, Chepang, Bhramu, Vayu, Kuswar, Kusunda, Tharu.

Lepcha of Sikkim.

Lhopa of Bhutan.

In N. E. Bengal are the Bodo, Dhimal, Kochh, Garo, Kachari.

In the Eastern Frontier of Bengal are the Munipuri, Mithan Naga, Tablung Naga, Khari Naga, Angami Naga, Namsang Naga, Nowgong Naga, Tengsa Naga, Abor Miri, Sibisagor Miri, Deoria Chutia, Singpho.

Mishmi, Chulikata Mishmi.

Abor group, viz. Padam and other Abor, Miri and Hill Miri, Dophla, Aka or Hrusso.

Naga of Upper Assam, the lower Naga group.

Naga west of the Doyang river.

Kuki, Manipur, and their neighbours Kouponi.

Mikir, Jaintia and Khasya.

Arakan and Burma, Khyeng or Shou, Ka-mi, Ku-mi; Mru or Toung, Sak.

Siam and Tenasserim, Karen, Toung-thu, Ahoni, Kham-ti, Laos.

Central India, Ho (Kol); Kol; (Singbhum), Santal; Bhumij Rajmahali, Gond, Khond, Saora, Chentsu, Bhil, Patoon.

Broken Tribes, Cheroo, Kharwar, Parheya, Kisan or Nagesar, Bhuiher, Boyer, Nagbansi, Kaur or Kaurava, Mar.

Southern India, Toda, Kota; Badaga, Irular, Kurambar, Mali-Arasar, with many broken tribes in the plains, Yerкала, Pariah, Chakili, Mhar, Mhang, Okkalu, Holar.

Ceylon, Vedda.

HILL TROUT of Hindustan is no trout, but a large bony fish of a silver-grey spotted with black; will eat everything he can swallow; is often taken with an infant brother while spinning for his high-caste neighbours, with an artificial minnow of glass, with a piece of rag or newspaper, with bees, or dragon-flies caught off the bushes by the river, with a morsel of cabbage leaves boiled, but in general with the orthodox spinning, the minnow, or the artificial fly, made very large and showy. In Kashmir, five bags of these fish have been caught, some weighing 7 lbs. each. One seen in the market was 12 lbs. The Walur Lake, the Dhul Lake, and the Jhelum all swarm with them about the mulberry trees, the fallen fruits of which seem to afford them in legions a sweet and pleasant diet, if one may judge by the mighty rush ensuing on a shaking of the boughs. Boatmen avail themselves of this, cover a bent pin with a plump mulberry, and drop it amid the shoal. This fish is widely distributed; abundant in the backwaters of the Ganges, in the great rapids of that river far above Hurdwar, and in Dehra Doon, in lat. 27° 28' N., in the upper branches of the Brahmaputra, and in the Mishmi and Abor backwaters, also in most

of the small rivers of the Panjah, in which latter locality it does not seem to grow very large, though plentifully, owing perhaps to its being the common food of numerous fish of prey. Is abundant, though small, in Central India, in Bundelkhand and Jhansi districts. That it is estable, is all that can be said, but giving good sport in its way, and yielding subsistence to the monsters of the deep, and useful in diverting their attention from mischief to their own breed. The Europeans in Northern India apply the name of trout to three spotted carp, species of *Barilius*. *B. bola*, which takes a fly well, is said to attain 5 lbs. weight. It is found in Northern India, Assam, and Burma. *B. tileo*, smaller, is of Assam and Bengal; and *B. bendilisis* is a third small species. See Chiliva; Fish; Fisheries.

HILSHA or Ilisha, *Clupea ilisha*, shad, sable fish of Southern India.

Nga-tha-louk, . . . BURM. | Palasa, TAM.
Pulla, SIND. | Ulumoolum, TEL.

This is a migratory sea fish of the herring tribe, which enters the Ganges and Irawadi and Indus rivers to deposit its eggs. It is the shad of Bengal and the sable fish of Trichinopoly. In one of them 1,023,645 eggs were counted. The females are more numerous than the males. It is best preserved in tamarinds or vinegar.—*Dr. F. Day*.

HIMALAYA MOUNTAINS comprise a system of stupendous ranges, with the loftiest peaks in the world. They extend continuously for a distance of 1500 miles along the northern frontier of British India, from the Indus to the gorge where the Dihong bursts through their main axis, thus embracing the meridians 75° to 95° E. On the west, the Himalaya, with the Kouen Lun, converge towards the Pamir table-land, whence the Tian Shan and the Hindu Kush radiate, and the Kouen Lun and the Himalaya form respectively the northern and southern escarpment of the lofty Tibetan plateau, which has an average level of 15,000 feet. The average breadth of the Himalaya is computed at 150 miles, with a mean elevation of 18,000 to 20,000 feet; but there are solitary mountains and peaks rising higher,—for instance, in the Western Himalaya, Jumnotri, 20,038 feet; Kedarnath, 22,790 feet; Badrinath, 23,210 feet; Nanda Devi, 25,661 feet;—and in the Eastern Himalaya, Dhawalgiri, 26,826 feet; Daya bang, 23,762 feet; Mount Everest, 29,002 feet; Kanchinjinga, 28,156 feet.

The Himalayan system is composed of a northern, a central, and a southern range.

The northern range is naturally divided into a western and an eastern section. Its western section is known as the Kara-korum or Mustagh, and it forms the water-parting between the basins of Lob-Nor and the Indus. The Kara-korum pass is on the real line of water-parting, and the streams north of it join the Tarim basin, while those on its southern slope discharge into the Indus.

Several of the peaks along this western section of the Himalaya attain a height of 25,000 feet, and the chief one, 'K. 2', 28,265 feet, is second in altitude to Mount Everest. This section of the range extends from its junction with the Hindu Kush near the Baroghil pass to Mount Kailas, near Lake Manasarowar in Tibet, and the best known passes across it are the Kafa-korum and the Changchenmo, exceeding 18,000 and 19,000 feet respectively in height. But there are also the

Karambar pass, the Mustagh pass, and a pass on the road between Rudok and Kiria. The southern slopes of the Mustagh range in its northern portion are covered with enormous glaciers, one of them 35 miles long. These glaciers are the source of streams which flow southwards between bare craggy mountains and join the Indus or its tributary the Shayok. The collective name applied to the various districts which comprise the valleys of the Indus, Basha, Braldu, Shigar, Shayok, etc., is Baltistan. The inhabitants are Mahomedanized Tibetans of Turanian stock, and there is a small body of Aryans called Darda.

To the E. of Lake Manasarowar, a saddle which is crossed by the Mariam-la pass, connects the northern and central ranges of the Himalaya. On its eastern side rises the Tsan-pu (To-chok-tsang-pu), of which the northern range forms the northern watershed as far as to the south of the Sky Lake (Tengri-nur in Mongolian, and Nam-cho in Tibetan). Hence it appears to curve round the lake in a north-easterly direction for 150 miles, after which its further course is unknown.

The subsidiary chain between the northern and central ranges runs from Mount Kailas, near Lake Manasarowar, to the junction of the Indus and the Shayok. Major Cunningham called it the Kailas or Gangri range. It is 550 miles in length. Its peaks average between 16,000 and 20,000 feet in height, and it is crossed in its northern portion by a number of passes, which lead from the valley of the Indus into that of the Shayok. About lat. 33° 12' N., the Indus deviates at right angles, and pierces right through this granite range to resume a north-westerly course beyond. The southern portion of this range lies in Tibetan territory, and has been crossed at four points by native explorers.

The central range has its commencement in the Nanga Parbat, 26,629 feet high. It towers conspicuously on the extreme verge of the Kashmir frontier above the Indus valley, and has been seen by General Cunningham from Rannagar, in the Panjab, a distance of 205 miles. Proceeding from this point towards the south-east, we find that for the first 50 or 60 miles the central range forms the water-parting between the Indus and the Jhelum. Two roads, joining the Kishenganga and Astor rivers, go over passes of upwards of 13,000 feet, and others lead into the Dras valley. At the point where the Dras pass (11,300 feet) affords access from the Kashmir valley to the high table-land of Ladakh, a minor range branches off and separates successively the Sind valley, the northern part of the vale of Kashmir, and the Jhelum valley, on the south, from the Kishenganga on the north. A little south of the same pass, another ridge branches off, and, running north and south, forms the eastern boundary of the vale, till, near Banihal, it joins itself to the Pir Panjal range, which again runs east and west for about 30 miles, then turns N.N.W., and continues for some 40 miles more till it dies off towards the valley of the Jhelum. This range completes the mountainous girdle which encircles the valley of Kashmir. About the vicinity of the Dras pass, the range increases in height, and the peaks are high enough to form glaciers, two of them, Nun and Kun, being each over 23,000 feet in height. The north-eastern slope of the range drains into

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the Indus, the Suru and Zaskar being the chief rivers. A little farther to the south, the Bara Lacha pass (16,200 feet) affords a route from Lahul and Kangra to Leh.

Farther to the south-east, the central range becomes broken by the precipitous gorge of the Sutlej (the classic Hesudrus), which, rising in the sacred lakes of Rakas Tal and Manasarowara on the southern side of the Tibetan Kailas, takes a north-westerly course for 280 miles, till, joined by the waters of the Spiti river, it turns and cleaves through the two outer ranges, emerging on the plains of India at Ropar, after a course of 560 miles. The junction of the Sutlej and Spiti rivers is marked by the Lio Porgyal peak, which rises sheer 22,183 feet high from the edge of the two streams, 13,000 feet below its summit. Further to the S. E., numerous passes lead from British territory over the central range into Hundes. The Niti pass (16,676 feet) leads across it to Khotan, by way of Totling, Gartokh, Rudokh, Noh, and Kiria, and is the best and easiest route between Eastern Turkestan and India. Eastward of this point, the central range is occupied by the Native States of Nepal, Sikkim, and Bhutan. On its northern side the range has enormous glaciers, which drain into the Tsan-pu river; while its southern slopes give rise to many large rivers, which burst through the southern range, and eventually discharge their waters into the Ganges or Brahmaputra. The source of the Ganges lies a few miles beyond Gangotri; and the Kali, Karnali, Narayani, Buri Gandak, Tirsuli Gandak, Bhutia Kosi, Arun, all flow through Nepal. To the east of the Mariani-la pass, only three Europeans have ever crossed the central range. An imposing view of the long line of glaciers and peaks of the central range was obtained by Dr. Hooker from the Donkia-la pass in Sikkim. Two of the most remarkable of the inland lakes are the Palti and Chomtdong. The former (14,700 feet above the sea) is about twenty miles long and sixteen broad, without an outlet. This lake is situated north of the Arun basin, and, like the Palti lake, is encircled by spurs from the central range. The Palti or Yam-dok-cho lake is also without an outlet, and is ring-shaped; it is supposed to be about 45 miles in circumference. An island in its centre rises into rounded hills from 2000 to 3000 feet high.

The southern range, at its north-western extremity, appears to spring from the southernmost point of the Pir Panjal range. At its outset it is pierced by the waters of the Chenab, the main stream of which rises in Lahul far to the south-east, under the name of Chandra-bhaga, and for 180 miles drains the south-western and north-eastern slopes of the central and southern ranges respectively. The peaks of the southern range gradually increase in height from 1300 to 20,000 feet, and its outer slopes are washed by the Ravi and Beas, the feeders of which rise on the southern side of the culminating range. Passing the Sutlej, the road up the gorge of which is connected with Simla by the great Hindustan and Tibet road, we meet the Bhagirathi, Alaknanda, and a variety of rivers, which rise in the space between the two southern ranges.

The western terminal portion of the Himalaya chain comprises a number of great ranges, which are commonly known as the Mustagh or Kara-

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korum, Ladakh, Zaskar or Baralacha, and Pir Panjal, all of which have a N.W. to S.E. direction. The Baralacha separates the Indus river from its first affluents, as the Eastern Himalaya separates the Tsan-pu from the Ganges. The average elevation of Kashmir valley is between 5000 and 6000 feet above the sea; Hiramuk Mount, 13,000 feet; Pir Panjal, 15,000 feet; average of the valley of Indus (north of Kashmir valley), 6000 to 7000 feet.

Major Cunningham gave the following summary of the information he collected regarding the great mountain chains in the north of the Panjab:—

Name of Chain.	Length, miles.	Highest peak, feet.	Mean height, feet.	Snow line.	
				North	South
Kara-korum or Tr. Tibetan, Kailas or Gangri, or Mid-Tibetan.	450	24,000	20,000	18,000	18,500
Tr. Himalaya or Tsho-moriri.	550	20,700	20,000	18,500	19,000
W. Himalaya or Bara Lacha.	350	21,000	19,300	19,500	20,000
Mid-Himalaya or Pir Panjal.	650	25,749	20,000	19,000	18,000
Outer Himalaya, or Daula Dhar.	407	21,786	17,000	17,000	16,000
	300	16,174	15,020	The snow disappears annually.	

Peaks.—Some of the peaks on the Kara-korum range, along which runs the boundary between Ladakh and Yarkand, are very high, the highest being 28,278 feet above the sea. This mountain is called K. 2, and towers above all the surrounding ranges, being probably the second highest in the world. The heights to the south of the Sutlej range from 20,103 feet to 25,749 feet, and the heights of the passes vary from 16,570 feet to 18,331 feet. In the Western Himalaya the snow limit ranges are from 17,500 to 20,106 feet. The highest peaks of the Western Himalaya are,—Nanda Devi or Jawahir, 25,749 feet; Gyn peak, 24,764 feet; Mono Mangli, 23,900 feet; Porgyal, 22,700 feet.

The Giant's Peak and the Eastern Dal-la are occasionally called Gemini by residents of Assam who have seen the Himalaya panorama from Nanklai in the Khassya Hills.

Eastern Dal-la, lat. 27° 52' 1" N., long. 92° 38' 6" E., in Bhutan, in the immediate vicinity of the Giant's Peak top of the peak, is 21,435 feet according to Herm. Schl., and 21,476 feet, Pemberton.

A line of high snow peaks can be traced running nearly parallel to the plains of India, and extending from the places of passage of the Indus on the west and Brahmaputra on the east. These snowy peaks are separated from each other by deep ravines, along which flow large and rapid rivers. Every pre-eminent elevation is not, however, so much a peak as a cluster of peaks, springing from a huge sustaining and connected base. Between lat. 27° 16' 23" and 31° 6' 8" N., and long. 78° 32' 32" and 89° 18' 43" E., are seventy-nine peaks, ranging from 14,518 feet, to that of Mount Everest, 29,002 feet above the sea. The Pir Panjal, a great snow-clad range, shuts in the valley of Kashmir on the south. With that exception, the ranges covered with perpetual snow are first met with on the southern slope of the great Indo-Tibetan table-land, along a line between 80 and 90 miles from the foot of the outer mountains, and 20 or 30 miles south of the Indian watershed; and from this line northward snowy peaks abound everywhere over the

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summit of the table-land. The average elevation of the crest of the Indian watershed, between the points where the Indus and Brahmaputra cross it (1500 miles), probably exceeds 18,000 feet. The heights of the following peaks are given by Mr. Trelawney Saunders in *Geog. Mag.*, July 1877:—

	Lat.	Long.	Ht., Ft.
Aku,	28° 23' 25"	85° 10' 12"	24,313
Barathor,	28 32 0	84 9 32	26,069
Badrinath,	30 44 16	79 19 20	23,210
Bus or Srikanta,	30 57 25	78 50 50	20,149
Bander Poonch,	31 0 12	78 35 45	20,758
Black Rock Guaream,	27 34 7	88 48 30	17,572
Choomalari,	27 49 37	80 18 43	23,944
Choomoonko or Chola,	27 27 28	88 49 38	17,325
Chamlang, E.,	27 46 27	87 1 21	24,020
W.,	27 45 16	86 51 56	22,215
Chauhisal,	28 49 33	82 39 33	19,415
Dayabang,	28 15 17	85 33 35	23,762
Dhoulagiri,	28 41 43	83 32 9	26,826
Everest, Mount,	27 50 12	86 58 6	29,002
Jannoo,	27 40 52	88 5 13	25,304
Jib-jibia,	28 21 3	85 49 21	26,305
Jaonli,	30 51 18	78 53 53	21,672
Jamnotri,	31 0 25	78 34 6	20,038
K. 2,	27 42 5	88 11 26	28,278
Kanchinjanga,	27 36 20	88 9 15	24,015
Kabroo,	30 55 13	79 38 4	25,373
Kamet or Ibi Gamlin,	30 47 53	79 6 34	22,700
Kodarnath,	28 35 38	83 51 40	26,522
Morshadi,	27 30 36	88 19 28	19,146
Narsing,	28 45 39	83 25 52	25,456
Narayani,	30 18 51	80 6 39	22,536
Nandakut,	30 22 31	80 0 50	25,661
Nandd Devi or Latu,	30 41 6	79 44 53	22,093
Nandakna,	30 43 52	70 26 50	21,661
Nila Kanta,	27 56 52	88 53 5	23,186
Powhoonri or Donkia,	27 34 34	88 15 35	22,017
Pandim,	30 12 51	80 28 9	22,673
Pancha-chuli,	27 53 18	87 7 54	27,799
Sihaur,	27 58 13	86 28 32	23,570
Sankpai,	31 6 8	78 32 32	20,405
Sargoroen,	30 30 56	79 54 31	23,092
Trisool, E.,	30 18 43	79 49 7	23,382
W.,	30 51 40	79 2 14	22,582
Tharlasgar,	28 32 55	84 36 9	26,680
Yassa,			

Watershed.—The Himalayan watershed lies at a very considerable distance to the north of the great Himalayan peaks, which, from the side of Hindustan, seem to form the watershed. The greater part of the giant peaks, which rise to an elevation of 25,000 to 29,002 feet, are situated not on the central axis but to the south of it. Viewed from a distance of about 150 miles, these mountains present a long line of snow-white pinnacles, which on a nearer approach are seen towering above the dark line of lower but still lofty mountains. The steep face is toward the plain, and to the north the chain supports the lofty table-land of Tibet. Deep narrow valleys, separated by ranges running either parallel or at right angles with the main ridge, contain the numerous sources of the rivers flowing into the Ganges, the Indus, and the Brahmaputra.

Rivers.—The great rivers issuing from the Himalaya from west to east in succession, are the Jhelum, the Chenab, the Ravi, the Beas, the Sutlej, the Jumna, the Ganges, the Gogra, the Gandak, the Kosi, the Tista, the Monas, and the Subansiri. The Indus, the Kābul river, the Jhelum, the Chenab, the Ravi, the Beas, and the Sutlej form seven large rivers, which flow through fertile valleys. The Jhelum runs in the valley of Kashmir. The course of the Ravi and Chenab is short, and their valleys small. The Beas in its

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upper portion is in the Kulu valley, but lower down it becomes entangled amongst the lower ranges west of Mundi, whence it opens on the plains of the Sutlej. The Sutlej has a tortuous entangled course in its upper parts, but enters the valley west of Simla, in Sukeyt and Balaspur. The Brahmaputra, Indus, Sutlej, and Kurnali or Gogra are called by the Tibetans, Tam-jan-khamba, or Horse's Mouth; Shingh-gi-khamba, or Lion's Mouth; Langchan-khamba, or Bull's Mouth; and Mabja-khamba, or Peacock's Mouth. These four great rivers drain the Kailas group of mountains. They rise close to the great Kailas Purbut. Eastward of the meridian marked by the Sanpu falling into the plain of Assam, the rivers descending from the eastern part of the Tibetan highland cut up the plateau into a succession of lofty ranges and deep gorges running north to south. These rivers include the Dihong and other affluents of the Brahmaputra, also the great Yang-tze-kiang with its tributaries, which flows southwards to lat. 26° N., then turns eastward, to traverse the whole of China proper.

Passes.—The Himalaya present almost insurmountable obstacles to communication between the countries which they divide, thereby separating the Boti or people of Tibet from the Hindu family of India. The distinction of climate is not less positively marked, the ranges forming the lines of demarcation between the cold and dry climate of Tibet, with its dearth of trees, and the warm and humid climate of India, with its luxuriance of vegetable productions. There are, however, many passes. In Kanawar there are fifteen, at elevations varying from 15,000 to 17,000 feet. From the peak of Mono-mangli to the sources of the Gilgit and Kunar rivers, not less than 650 miles, the chain is pierced by the Sutlej and Para at the base of Porgyal, and by the Indus at the foot of Dyanmur.

Between Gilgit and Chittagong there are a hundred passes; but of all these, the basins of the Ganges and its four great feeders, the Gogra, the Gandak, Kosi, and Tista, are the great mountain passes of the Himalaya.

The following are the heights of passes over the Outer Himalaya range:—

	Lat.	Long.	Ht., Ft.
Barga,	31° 16'	78° 19'	15,000
Ghusul,	31 21	78 8	15,851
Gunas,	31 24	78 8	16,026
Kimila,	31 15	78 25	17,000
Lumbia,	31 16	78 20	16,000
Marga,	31 16	78 21	16,000
Nibrung,	31 22	78 10	16,035
Nulgun,	31 19	78 13	14,891
Rapin,	31 2	78 10	15,480
Shatul,	31 25	77 58	15,555
Siaga,	31 16	78 20	16,000
Sugla,	31 13	78 29	16,000
Sundru,	31 24	78 2	16,000
Yusu,	31 24	78 4	15,877

Sub-Himalayas or Sivalik. Along the southern base of the Himalaya, and parallel with the general direction of the mountains, a series of comparatively low ridges extends, formed of tertiary rocks. In the Panjab, the transition from the plains to the outer hills is marked by a belt of dry, porous ground, seamed by numerous gullies or ravines, from 100 yards to a mile wide, partly covered with long, tufty jungle grass. To the east the Terai occupies the same position. This is a belt of waste, marshy ground, a malarious region

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of varying breadth, lying below the level of the plains. This tract affords pasture to innumerable herds of cows and buffaloes. Beyond lies a dry belt of rising ground, called Bhavar, chiefly of a gravelly and sandy nature, with abundance of the sal tree (*Vatica robusta*). Next intervenes a range of fossiliferous sandstone, which almost uniformly edges the Himalaya from the Jhelum to Upper Assam. The space between these and the slope of the Himalayas themselves is occupied by the Duns, the Maris (in Nepal), and Dwaras (in Bhutan), longitudinal valleys of rising ground, either cultivated or yielding a plentiful forest growth. Streams issuing from the Himalayan ranges lose a great part or the whole of their water by percolation through the gravel in the Bhavar region. At the base of the slope, much of the water that has percolated the gravel re-issues in the form of springs, the ground is marshy, and high grass replaces the forest. This tract is the Terai, a term not unfrequently applied to the whole forest-clad slope of the Himalayas, known also in Nepal as Morung.

Sivalaya (Sivalik) is the local name of the range separating the Dehra Doon from the plains east of the Jumna, and this has given the term Sivalik. It was in the Sivalik Hills that Lieut. (General Sir Proby) Cautley, in the early part of the 19th century, discovered the presence of fossils; and the collections made by him and Dr. Falconer were described by the latter in the *Fauna Antiqua Sivalensis* and *Palæontological Memoirs*. The great fossiliferous deposit of the Sivaliks is near the valley of Markanda, westward of the Jumna, and below Nahun. By the joint labours of Lieut. Cautley and Dr. Falconer, and of Lieutenants Baker and Durand, a sub-tropical mammalian fossil fauna was brought to light, unexampled for richness and extent in any other region then known. It included, amongst the Primates, species of macacus (2), and *semnopithecus* (2); of the Carnivora, species of *felis*, *canis*, *ursus*, *hyaena*, *meles*, *melivora*, *lutra*, *machærodus*, *enhydriodon*, etc.; of the Proboscidea, *elephas* (7), *euelephas loxodon* (1), *stegodon* (5), *mastodon* (4), *tetralophodon* (6), *trilophodon* (7); of the Ungulata *perissodactyla*, *rhinoceros*, *acerotherium*, *listridon*, *equus*, *hipparion*; of Ungulata *artiodactyla* species, *hippopotamus*, *hippopotamidon*, *tetraconodon*, *sus*, *cervus*, *camelopardalis*, *sivatherium*, *bos*, *bison*, *bubalus*, *antilope*, *capra*, *ovis*, *camelus*. Of the Rodents, species of *mus* (1), *rhizomys* and *hystrix*. Among the Reptilia, monitors and crocodiles of living and extinct species, the enormous tortoise, *Colossochelys Atlas*, with numerous species of *emys* and *trionyx*. And, along with fossil fish, Cyprinidæ and Siluridæ, no less than 25 species of shells were found, all of which but 4 are now extinct. The general facies of the extinct fauna exhibited a congregation of forms participating of European, African, and Asiatic types. They are beautifully arranged in the London Natural History Museum.

Himalaya, as a name, is from the Sanskrit words *Hima*, snow, and *Alaya*, an abode. The range is also called *Himadri*, and *Himavat*; also *Himachala* (snowy mountain), and also *Himadaya*, the place of appearance of snow (*Adaya*, appearance), whence the classic name *Ætnodus*. *Himavat*, the Western Himalaya, where it bifurcates and embraces the country occupied of old by the Sakæ, was the

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Emas of ancient geographers, the *Himin* of the Mæso-Gothic, the *Hemel* (Himmel) of the German, and the *Heaven* of the Anglo-Saxon. Pliny was fully aware of the signification of the name, for he says (*Hist. Nat.* vi. p. 117), '*Imaus in colarum lingua, nivorum significans*.' Hindus call all the high snowy peaks of the Himalaya by the generic name *Kailasa*; and, in the mythology of the Hindus, Mount *Kailasa* is the heaven of *Siva* and of *Vishnu*; another fabled Himalayan mountain, *Meru* or *Su-meru*, being the site of *Swarga*, the heaven of *Indra*; and in Hindu mythology the sacred *Ganges* is fabled to spring from the feet of *Vishnu*.

Races.—The habitable parts of the range are occupied by Mongoloid races, and to a small extent by tribes of Aryan descent; and many of the tribes are supposed to have occupied their present localities before the 4th or the 7th centuries A.D. A sparse Aryan population lies scattered among the valleys.

The Bhot area is bounded on the south by India and Kashmir, on the north by Chinese Tartary, and on the west by Little Bokhara and Kafiristan. Amongst them may be mentioned the Mahomedan Bhot of Baltistan or Little Tibet, of Rongdo, Skardo, Parkuta, and Khartakshi, of Shigar, Chorbud, etc.; (2) the Buddhist Bhot of Ladakh, Hungrung and Kanawar, the Bhot of the Chinese empire, the Tibetans of Rudok, Garo, Goga, etc., of Lhasa and Tishu-Lumbu, the Si-Fan, the Lhopa of Bhutan, the Tak, the Bhot of Garhwal, Kamaon, and Nepal; the Chepang, and probably the Rhondur, the Chak, the Drok, the Hor, the Kolo; and (3) in the further east are the Koch'h, the Dhimial, the western Bodo of Sikkim; and (4) still farther are the Bhutan frontier, and still farther are the eastern Bodo or Boro of Assam and Cachar, the Garo, the Khasya, and the Mikir. To the central region are similarly confined, each in their own province, from west to east, the Dunghar (west of Nepal), the Dardu, the Gakar, the Bamba, the Kakka, the Dogra, the Kanet, the Garhwali, the Kohli, the Kas or Khasia (in Nepal), the Magar, the Gurung, the Kusunda, the Chepang, the Sunwar, the Newar, the Murmi or Tamar, the Khombo or Kiranti, the Yakha, the Limbu or Yak-thumba, the Lepcha or Deunjongmaro (in Sikkim), the Lhopa (in Bhutan), the Dafa (east of Bhutan), the Abor and Bor, the Miri, and the Mishmi. The Cis-Himalayan Bhotia (called Palusen, Rongbo, Serpa, Kath-Bhotia, etc.), extend along the whole line of the ghata, and with the name have retained unchanged the lingual and physical characteristics, and even the manners, customs, and dress, of their transnivean brethren. The passes through the Snowy Range are occupied by the Bhoti, who have a monopoly of the trade across the Himalaya, are carriers, loading the goods on the backs of sheep. Most of the traders of the snow valleys have some members of their families residing at Daba or Gyani, on the Nuna khar lake.

The men of all races in the hills are short and of poor physique; they look worn, and get deep-lined on the face at a comparatively early age. The young women are often extremely pretty, those living in the higher and colder villages having, at 15 or 16, a complexion as fair as many Spaniards or Italians, and with very regular features. But they grow darker as

they advance in years, and become very plain. As a general description of the Mongoloid tribes there, the head and face is very broad, usually widest between the cheek-bones, sometimes as wide between the angles of the jaws; forehead broad, but low and somewhat receding; chin defective; mouth large and salient, but the teeth vertical, and the lips not tumid; gums thickened; eyes wide apart and oblique; nose long, pyramidal; hair of head copious and straight; of the face and body deficient; stature low, but muscular and strong; character phlegmatic, good-humoured, cheerful, and tractable. Polyandry yet exists partially, but is disappearing. Female chastity is little heeded before marriage. Crime rare, and they are truthful. They sacrifice, and are little Hinduized. Their craftsmen are stranger helot races, located amongst them from time immemorial, as smiths, carpenters, curriers, potters. The Newar alone have any literature, and that wholly exotic.

To the lower range, again, and to similarly malarious sites of the middle region, are exclusively confined the Koch'h, Bodo, Dhimel (Sikkim and east of it), the Kichak, Pallas, Hayu, Tharu, Dhenwar, Kumba, Bhramu, Dahi or Dari, Kuswar, the Bhotia (in Nepal), the Boksa (in Kamaon), the Khatir, the Awan, the Janjoh, the Chib, and the Bahoa (west of Kamaon to the Indus).

The Khas, Magar, Gurung, Newar, Murmi, Lepcha, and Bodpa, etc., are dominant unbroken tribes. The broken tribes are all the Awalia, the Chepang, Kusunda, and Hayu, and there are tribes of helot craftsmen, blacksmiths, carpenters, curriers, etc., who are regarded as unclean. The unbroken tribes are the more recent immigrants from the north; their languages are of the simpler Turanian type, whereas those of the broken tribes are of the complex or pronomenalized type, and the phenomena of ethnology in the Himalaya warrant the conclusions that they were peopled by successive swarms from the great Turanian hive, and that its tribes are still traceably akin alike to the Altaic branch of the north, and to the Dravidian of the south. The Khas, the Kanet, the Dogra, and several other tribes of the Western Himalaya, are clearly of mixed breed, descended from Tartar mothers and Aryan fathers.

The Himalayan mountains thus form the meeting-ground of the Aryan and Turanian races. The two stocks are in some places curiously intermingled, though generally distinguishable. To the extreme north-west are found the Dard, an Aryan race of mountaineers, abutting on the Pathans or Afghans on the west, and the Balti, a race of mahomedanized Tibetans of the Turanian stock, on the east. To this latter stock also belong the Champa, a race of hardy nomades, wandering about the high-level valleys of Rupshu, and the Ladakhi, a settled race, cultivating the valleys of their country. The other Aryan races are the Pahari or 'mountaineers,' the Kashmiri, the Dogra, and Chibhali, who inhabit the outer hills. In Garhwal and Kamaon we find the Kanawari (inhabitants of Bashahir), the Nilang people, who differ in no respect from those of Hundes, and the inhabitants of the Bhotia Mahals of Kamaon and Garhwal, who are of mixed Tartar and Indian origin.

A number of the hill-men are Rajputs, and

there are a few villages of Brahmana. The Dom are hereditary bondsmen to the Rajputs. Basgi men and women are singers at the temples. From Kashmir eastwards, all the easily accessible portions of the Himalaya are occupied by Aryan Hindu as far as the eastern border of Kamaon and the Kali river, separating Kamaon from Nepal,—the Tibetans being here confined to the valleys about and beyond the snow. People of Tibetan blood have migrated into Nepal throughout its whole length, and have formed mixed tribes, whose appearance and language is more Tibetan than Indian, but whose religion and manners are Hindu. East of Nepal, in Sikkim and Bhutan, the Hindu element almost disappears, and the Tibetans are altogether dominant. Between the Kali and Dhansri, in Nepal, Sikkim, and Bhutan, the ordinary population consists of the following:—

1. Cis Himalayan Bhotia or Tibetans, called Rongbo; Siens or Kath Bhotia; Palu-Sen.
2. Serpa.
3. Gurung.
4. Magar.
5. Murmi.
6. Newar.
7. Kiranti.
8. Limbu or Yak-thumba.
9. Lepcha or Deunjong Maro.
10. Bhutanese, or Lhopa, or Dukpa, or Brukpa.

Gurkha, Gurung, Magar.—In Nepal, in the west are the Gurung and Magar tribes, short, with features of an extreme Mongolian type, full of martial ardour and energy. They are famed as the Gurkha soldiers. They have considerable intellectual ability.

The *Newar* of the valley of Nepal are the cultivating peasantry, have Tibetan features, with a fair and ruddy complexion. The language of the Magar, Gurung, and Newar is chiefly Tibetan. Farther east are the Keranti, Murmi, and others. Some mixed races are found to the south of each chain, as the Lahuli and Kanawari in the west, and the Gurkha and Bhutani in the east.

Highest Permanently Inhabited Villages.

1. Bhutan, Sikkim, Nepal.	2. Kamaon and Garhwal.
Yangma Guola, 9,279 feet.	Usaila, . . . 8,940 feet.
Lamteng, . . . 8,883 "	Tsobia, . . . 8,842 "
Bumtangtang, 8,668 "	Mukha, . . . 8,600 "
Lachung, . . . 8,630 "	Kathi, . . . 7,410 "
3. Simla and Kulu.	4. Lahol, Kanaur.
Bambhora Garh, 9,844 feet.	Darcke, . . . 11,740 feet.
Janglik, . . . 9,257 "	Rarik, . . . 11,685 "
Jatvar, . . . 8,177 "	Kunu, . . . 11,683 "
Kot, . . . 7,678 "	

5. Kishtwar and Kashmir.			
Sukne, . . .	9,122 feet.	Daver, . . .	7,718 feet.
Bara Banghal,	8,535 "	Kullan, . . .	7,175 "
Pashmin, . . .	8,351 "	Shapion, . . .	6,672 "

II. Highest Summer Villages of Kamaon and Garhwal.

They do not occur in the Himalaya west of Garhwal.	
Kedarnath, . . . 11,794 feet.	Niti, . . . 11,464 feet.
Goh, . . . 11,561 "	Nelong, . . . 11,350 "
Loa, . . . 11,510 "	Milum, . . . 11,265 "

III. Western Tibet.

A. Highest Permanently Inhabited Villages.	
Hanle, a Buddhist monastery, 15,117 feet.	Puling, in Gnari
Chushul, a small village, . . . 14,406 "	Khorsum, . . . 13,953 feet.
Pananuk, a shepherd's settlement, . . . 14,146 "	Towns with a considerable number of Stone Houses.
	Muglab, . . . 13,847 feet.
	Kibar, . . . 13,607 "
	Gya, . . . 13,548 "

B. Highest Summer Villages.	
Norbu, . . . 15,946 feet.	Puga, . . . 15,264 feet.
Chabrang, . . . 15,588 "	Gartok, . . . 15,090 "
Korzog, . . . 15,349 "	

C. Highest Pasture Grounds in Summer.	
Larsa, . . . 16,349 feet.	Rukchin, . . . 15,064 feet.
Zinchin, . . . 16,222 "	Amlung, . . . 15,300 "
Kiangchu, . . . 15,781 "	Jugta, . . . 15,058 "

HIMALAYA MOUNTAINS.

IV. Kouen Lun.

Highest villages, 9,400 feet.	Highest pasture grounds, 13,000 feet.
Highest summer villages, 10,200 "	

V. Andes. Highest Towns and Villages.

Authorities : Burkart ; Humboldt ; Pentland ; Wislizenus.

Cerro de Pasco, 14,098 feet (H.)	Turche, 10,641 feet (H.)
Potosi, 13,665 " (H.)	Cebolullullo, 8,890 " (P.)
Cuzco, 11,380 " (P.)	Zacatecas, 8,051 " (B.)
	Mexico, 7,469 " (H.)

Sanatory stations and convalescent depots for British troops have been formed on spurs from the Himalayas, as well as on other of the hill ranges of British India, as on Mount Abu, Mahabaleshwar, Ramannallay, the Neilgherries. In 1877 the mortality at the hill stations was only 6·49 per 1000; in Bengal proper, 9·11; in Meerut and Rohilkhand, 10·16; in the Panjab, 10·68; Gangetic provinces, 13·24; Agra and Central India, 14·36.

Almorah in Kamaon, 5300-5500 feet.	
Chinese, on the Sutlej, 150 miles from Simla, 9096 "	
Dalhousie, on the Chamba Hills, 5700 "	
Darjiling, 7218 "	
Dharmasala or Bhagsu, Kangra Hills, 5000-6000 "	
Dughai, 16 miles S. of Simla, 5000-6000 "	
Kussowlee, 45 miles from Ambala, 6400 "	
Landour adjoining Mussoori, 7300-7572 "	
Murree, in the Hazara Hills, 8000 "	
Mussoori near Landour, 6400-7200 "	
Naini Tal, in Kamaon, 22 miles S.W. of Almora, 6409-7400 "	
Simla, 77 miles from Ambala, and 22 miles N.E. of Subathu, 6500-8000 "	
Subathu, 9 miles from Kussowlee, 4000 "	

Languages.—In the Himalaya, according to Mr. Aitcheson, the various dialects are mixed together in great confusion. On the northern Assam frontier are found, in the following order from E. to W., the Aka, Abor, Dafia, Miri, and Mishmi; next to these is Bhutia, which carries us as far E. as the Tista; Sikkim, or the country between the Tista and the Singhaleela range, contains the Lepcha and Limbu dialects. The Sikkim Terai gives us the Dhimal, Bodo or Meehi, and Koch'h, which latter also occupy the plains of Koch-Bahar, and the northern parts of Runjpur, Dinajpur, and Purniah. In Nepal, according to Mr. Hodgson and Dr. Campbell's researches, we find a perfect maze of dialects. Beginning from the Singhaleela range, we find Limbu or Kiranta, which goes W. as far as the Dudkusi river, in long. 86° 44'. Sherwill found the Gurung in the higher parts of Singhaleela, closely connected with whom are the Murni. Along the lower hills are the Magar, who extend to the W. as far as Palpa. Somewhere about here we should apparently place the Brahmu, Chepang, Hayu or Vayu, and Kusunda. In Central Nepal are the Newar, Pahri, and Brahmo, a dialect of Magar, also the Darahi or Dorhi, Danwar, and Paksya. The Tharu live in the Terai between Chumparum and the Khatmandu valley, as far W. as the river Gandak. These last four are classed among Indo-Germanic languages. The rest are Turanian, with more or less infusion of Hindi. The Parbatia or Paharia, a dialect of Hindi, is spoken all over Nepal, and is the court language. West of this again comes the Palpa, then the Thaksya, Sunwar, and Sarpa, the dialects of Kamaon and Garhwal, which carry us on to the Milchan of Kanawar, the Hundesi, and Tibarskad north of it. West of this come the Dogra dialects of the Panjab hills,

HIMALAYA MOUNTAINS.

Valleys.—The Dehra Doon is a winter valley. Its length is about 45 miles and its breadth about half that. It is shut on the north by the Siwalik range, rising 3000 feet high. On the E. are numerous mountains rising 7000 or 8000 feet, amongst them Mussoori and Landour; the Asun and the Sooswa rivers drain it. It is clear of jungle, and well cultivated. The tea-plant thrives, and the village of Dehra is large and thriving.

In the Kangra valley, some places like Bhagsu (Dharmasala), and the road from Kangra town, Haurabagh and Fouta-Kal, are beautiful, as also are the views of the Snowy Range. Kot Kangra or Kangra town was the capital of a powerful hill state, which was conquered by the Sikhs. It is 2500 feet above the level of the sea. Bhagsu, above Dharmasala, is 7000 feet above the sea. Haurabagh is 7000 feet, and Fouta-Kal 9000 feet above the sea. The Kangra people are sturdy, honest, and independent.

The Sutlej valley commences a few miles above Mundi, and continues up for about 40 miles, almost to Simla and Subathu, and has the sanatoria of Simla, Kussowlee, Nagkunda, and Chor. Mundi is the chief town of the Mundi state. The Sutlej people are amiable and gentle, free of low cunning, having the appearance of a mixed race between the Tartar and the common hill-men. They are fair, well made, and strong, but are filthy and indigent. The women have a toga fastened round the waist. Nagkunda is estimated at 9000 feet above the level of the sea. Chor is 12,000 feet.

The Beas valley exceeds in beauty that of Kashmir. It runs from the Bajaora mountain on the north, to the Snowy Range on the south, a length of about 60 miles, and its heights range from 4500 feet at the foot of the Bajaora pass, to 9000 feet at Ralha at the foot of the Rotang pass. Sultanpur is 4584 feet. It is the only town in the valley, and trades with Ladakh, Central Asia, Mundi, and Kangra. Polyandry prevails in the Beas valley, but the general immorality is ascribed to the large numbers of Yarkandi traders.

Kulu.—The poorer Kulu people wear only a blanket, wound around the waist, and one end flung across the shoulders and pinned across the chest; men and women often dress alike, but the long hair of the women is plaited in one tress.

Animal Life.—The partridge has been observed 16,080 feet above the sea, and crows and ravens 16,500. The Khalijs pheasants never descend below 12,000 feet; and high over the Kinchinghow (22,756 feet), flocks of wild geese are seen to wing their flight. The wild yak, the existence of which in the wild state has been doubted, and the kiang, five to six species of wild sheep and goats, hares, and mice, are found as high as 16,000 to 17,000 feet. The highest permanent village occupied by man is at 11,746 feet (Darccke), but in summer the herdsmen go higher up the mountains. On the southern slope the cultivation has not risen higher than 10,000 feet; but on the north side are the cultivated valleys of the Bampa river at 11,400 feet, and advancing farther, the habitations of man are to be seen as high as 13,000 feet, and cultivation 13,600 feet. There are many shrines and sacred spots within the ranges to which Hindu pilgrims resort, and numbers of them perish amidst the perpetual snows. Amongst them is Badarinath, in Garhwal, a temple dedicated to an

incarnation of Vishnu, 10,294 feet above the sea. Kedarnath is another Vaishnava temple within the Himalayas, 11,794 feet above the sea; Gangotri also, in Garhwal, at 10,319 feet of elevation, is another shrine, its vicinity being sacred to Hindu thought, as near it, at 13,800 feet, the Bhagirathi issues, no puny stream, from beneath a glacier.

Flora.—If we commence with the bases of these mountains, and pass successively through the several belts, we first find a vegetation similar to that of the southern provinces of India: the agricultural products consist of rice, millet, amaranth, an esculent arum, ginger, turmeric, a little cotton, and sugar, at the season, succeeded by wheat, barley, and buckwheat, in the cold-weather months. Along with plantains, oleander, and some of the orange tribe, we meet also with some species which were long considered peculiar to China, as *Marlea begoniifolia* and *Houttuynia cordata*, with species of *Chloranthus*, *Incarvillea*, and others. On ascending higher, we pass through different gradations of vegetation until reaching the regions of the oaks and rhododendrons, which is immediately succeeded by that of pines.

Trees grow very generally in the Himalaya up to heights of 11,800 feet, and in most parts there are extensive forests covering the sides of the mountains at but a little distance below this limit. In Western Tibet, however, there is nothing at all corresponding to a forest. Apricot trees, willows, and poplars are frequently cultivated on a large scale; poplars, indeed, are found at Mang-nang in Guari Khorsum at a height of 13,457 feet, but they are the objects of the greatest care and attention to the lamas. On the northern side of the Kouen Lun are no trees at all, owing to the considerable height of the valleys. In the Andes they end at about 12,130 feet; in the Alps, on an average, at 6400 feet, isolated specimens occurring above 7000 feet. The cultivation of grain coincides in most cases with the highest permanently inhabited villages; but the extremes of cultivated grain remain below the limit of permanent habitation. In the Himalaya, cultivation of grain does not exceed 11,800 feet, in Tibet 14,700 feet, and in the Kouen Lun 9700 feet. For the Andes the limit is 11,800 feet. In the Alps, some of the extremes are found near Findeler, at a height of 6630 feet, but the mean is about 5000 feet. The upper mean limit of grass vegetation in the Himalaya is at 15,400 feet; in Western Tibet, nearly the same level as for the highest pasture grounds, 16,500 feet, may be adopted. In the Kouen Lun grass is not found above 14,800 feet. Shrubs grow in the Himalaya up to 15,200 feet; in Western Tibet as high as 17,000 feet; and in one instance, at the Gunshankar, even to 17,313 feet. On the plateaux to the north of the Kara-korum, shrubs are found at 16,900 feet, and, which is more remarkable, they occasionally grow there in considerable quantities on spots entirely destitute of grass. As an example may be mentioned, amongst several others, the Vohab-Chilgane plateau (16,419 feet), and Δ Bashmalgun (14,207 feet). In the Kouen Lun the upper limit of shrubs does not exceed 12,700 feet. Above this height grass is still plentiful, and shrubs being here, as generally everywhere else, confined to a limit below the vegetation of grass, the range presents an essential contrast in this respect to the characteristic aspect of the Kara-

korum. The number of species of plants, as well as the number of individuals, is exceedingly limited in the higher parts of the Kouen Lun. Lichens are completely wanting in the dry angular gravel covering the high plateau, and the slopes of the mountains in their neighbourhood.

Snow is a phenomenon which varies extremely with the latitude, longitude, humidity, and many local circumstances. In Ceylon and the Madras Peninsula, whose mountains attain 9000 feet, and where considerable tracts are elevated above 6000 to 8000 feet, snow has never been known to fall. On the Khassya mountains, which attain 7000 feet, and where a great extent of surface is above 5000 feet, snow seems to be unknown. In Sikkim snow annually falls at about 6000 feet elevation, in Nepal at 5000 feet, in Kamaon and Garhwal at 4000 feet, and in the extreme West Himalaya lower still. In the Sikkim Himalaya, the giant peaks of Donkiaha, Kinchinghow (22,756 feet), and Kanchinjunga, the third greatest mountain of the world (28,156 feet), only surpassed in altitude by the Kara-korum (28,278 feet), and Mount Everest (29,002 feet), form the culminating points in this magnificently wooded region. The truly temperate vegetation supersedes the sub-tropical above 4000 to 6000 feet; and the elevation at which this change takes place corresponds roughly with that at which the winter is marked by an annual fall of snow.—*Outer Mountains of Kemaon*, by Capt. Herbert, in *Bl. As. Trans.* xi. xii.; *Royle*, *Ill. Him. Bot.*; *Herm. Schl.*; *MacG.*; *Campbell*, pp. 47, 147–8, 168; *Thomson's Travels*; *Hooker f. et Thom.* pp. 189, 190; *Hooker, Him. Jour.*; *Universal Review*, No. 3, p. 359; *Major Cunningham*; *Captain Strachey, Report, Brit. Association*, 1847; *Annals, Indian Administration*; *Medlicott and Blanford's Geology of India*; *Trelawney Saunders*; *Magnetic Survey of India*, p. 9; *Fraser's Himalaya Mountains*; *H. H. Wilson's Hindoo Sects*; *Imperial Gazetteer*.

HIMIS, a Buddhist monastery near Leh in Ladakh, 12,324 feet above the sea.

HIMMARGUJERATI, one of the eighty-four Gachchas of the Jaina sect.

HIMMAT BAHADAR, the pupil of Rajendra Gir, a Dasmiani ascetic.

HIMYAR was the fifth monarch from Kahtan, and gave his name to a dynasty which ruled over Yemen for many centuries, with varying fortune and different degrees of magnificence. Himyar was the first of the descendants of Kahtan who reigned over the whole of Yemen. This dynasty terminated on the conquest of Yemen by the Abyssinians in A.D. 525; and Dthoo Nawaz, the last of them, was the tyrant who destroyed the Christians of Nejran by burning 20,000 in a pit, noticed in chapter 85 of the Koran as the martyrs the brethren of the pit. The dynasty had ruled in Yemen for 2000 years, and its downfall was accelerated by the intolerance of the Jewish Tobbas. For a short time prior to A.D. 595, assisted by the Persian monarchs, Nushirwan and Khusrü Parwez, the dynasty again ruled over Yemen, but was ultimately put aside by Persia declaring Yemen to be a satrapy. The devotions of the Himyarites were addressed to a multitude of deities, of which the principal were the sun, the moon, and the planets. The most powerful of this dynasty was Abu Karib, commonly called Tobba. In A.D. 206 he covered the

Kaba with a tapestry of leather, and supplied its door with a lock of gold. The Beni Hinyar of S. Arabia claim to be descendants of that dynasty. Himyaritic inscriptions were found by Lieutenant Cruttenden in the town of Senaa. They are likewise met with at Aden. The language appears to lean more to Hebrew than the Ethiopic, while the Gara language, called also Ekhili or Mahrah, is more akin to Ethiopic. — *Playfair's Yemen*; *Niebuhr's Tr.* ii. 178; *Wright's Christ, in Arabia*.

HINAYANA, a form of Buddhism which prevailed in India east of the Indus. It was put aside by Kanishka, who introduced the Mahayana schism. The Hinayana was the purer sect of the Buddhists, followers of the lesser vehicle.

HIND. The term India, by which this country, as far as it was known, is distinguished in the earliest Grecian histories, appears to be derived from Hind, the name given to it by the ancient Persians; through whom, doubtless, the knowledge both of the country and its name were transmitted to the Greeks. Mr. Wilkins says that no such word as Hindu or Hindustan are to be found in the Sanskrit dictionary. The people among whom the Sanskrit language was vernacular, styled their country Bharata. — *Renell's Memoir*.

HINDI is a term used all over Northern India, to denote the vernacular tongue of the districts. Speaking generally, the whole of Upper India, including the Panjab, but exclusive of Bengal, may be said to be possessed by one language, the Hindi. This range, therefore, would include all the Rajput states, Jeysulmir, Ajmir or Rajasthan, Mewar, Marwar, Bikanir; and also the N. and E. in Lahore, Multan, Dehli, Agra, Malwa, Gujerat, Oudh, Allahabad, and Behar. Indeed, in the entire tracts lying between the Vindhya on the south, the Himalaya on the north, the Indus on the west, and Bengal and Assam on the east, are spoken what are called Hindi dialects, some of which contain Sanskrit words to the extent of nine-tenths of their entire vocables. The languages spoken in the north-western border of India, between it and Afghanistan, and those of India adjoining Afghanistan, are dialects of Hindi, but sufficiently distinct to be called Sindi, Panjabi, and Kashmiri. Lieut. Leech, indeed, has given vocabularies of seven languages spoken on the west of the Indus. According to Colebrooke, Hindi owes nine-tenths of its vocables to Sanskrit roots; but when it is spoken by Mahomedans, who added to it Arabic and Persian roots, it became converted into Hindustani or Urdu, literally the camp tongue. It is that which the Mahomedans generally, and the Indian army everywhere, speak, and has hitherto been the language employed in personal intercourse by the British in their communications with the people of the country, though only formed into a written tongue since the beginning of the nineteenth century by Dr. John Borthwick Gilchrist of the Bengal Medical Service. The learned and the great retain Persian for epistolary correspondence. When, however, Hindi is spoken by Hindus, who draw on Sanskrit for enrichment or embellishment, it appropriately retains the name of Hindi. Modified in these various ways, it is found not only on the plains of Hindustan, but also on the southern slope of the Himalayas, for Mr. Trail informs us that the language of Kamaon and Garhwal is pure Hindi. Indeed, generally,

along the Sub-Himalayan range as far as the Gogra river, the impure Hindi dialect introduced by the Gurkhas from the plains appears to be extirpating the vernacular Tibetan tongues of the aboriginal mountaineers. Mr. Masson made himself understood throughout the whole of Kohistan; and it will thus be seen that the term is used to bring under one common designation the various dialects of a language essentially one, but which has received no great cultivation in any of its forms. According to the Brahman pandits of Benares, there are hundreds of dialects equally entitled to the name. The Brij Basha (or Bhaka, as it is pronounced on the Ganges) and the Panjabi are the two most cultivated varieties of it; but the Panjabi passes into Multani, which a good philologist has shown to be a corrupted form of Panjabi; whilst Jataki, again, farther to the south, is a corrupted form of Multani; Sindi, according to Lieut. Burton, is a perfectly distinct dialect, though directly derived from Sanskrit. When the Mahrattas extended their conquests into Hindustan, they saw Hindi everywhere prevalent, from the limits of the desert to the frontiers of Bundelkhand, and, finding it different from their own tongue, they called it contemptuously Rangri Basha, quasi barbarous jargon. Sir John Malcolm extends the Rangri Bhaka as far west as the Indus, and east as far as the frontier of Bundelkhand, where, as in all the country to the Indus from the western frontier of Bengal, dialects of Hindi prevail. The Marwari and other dialects of Rajputana are evident varieties of Hindi introduced by the Rajput races.

The great variety of the Hindi dialects is doubtless owing to the absence or non-use of any common book, as the Bible or New Testament; and from the prolonged dominance of the Mahomedan rulers, and the encouragement given by them, by the ruling Hindu courts, and by the British, to the study of Persian, Hindi has been less studied than the Persian or modern Urdu. In 1872, in eight districts of the N.W. Provinces, the Urdu or Persian reading pupils in the Tabaili and Halkabandi schools largely exceeded the Hindi and Nagri reading scholars, ranging from $\frac{3}{4}$ ths to $\frac{1}{2}$ ths.

The people speaking these Hindi dialects are of different races. Amongst the races in this tract are the Mhairs of Ajmir, the Rajputs, the Hindus of the eastern counties, called Purbhiabs, and the descendants of the Aryan conquerors who have been residing there nigh two thousand years, men of large physical frame, proud, vain, self-reliant, and abstemious.

HINDIAN, a small town in Khuzistan, on the Tab river, 35 miles from its mouth, navigable to this town for bagla and boats. — *MacG.* p. 176.

HINDIKI, a name by which the Hindus are designated in Afghanistan and westwards to Russia. In Astracan there are about five hundred families. Mr. Mitchell says that the reputation of these Hindu colonists stands very high, and that they bear a preference over all the merchants of other nations settled in this great commercial city. The Hindiki in Afghanistan are described by Bellow as descendants of Arab fathers with Hindu mothers. The Indian born Habush, slaves of the Nawabs of the Karnatic, were styled Hindi.

HINDU is the ordinary name by which the

idol-worshipping people of British India are at present known, but the term is only of recent use. The races to whom it is applied are only now fusing, under the firm rule of the British, and never, hitherto, could have had one common designation. Bharata or Bharatavart'ha is an ancient Sanskrit name for part of the countries which Europeans include in the term India. Hindu for the people, and Hindustan for the country, now so generally applied by natives as well as foreigners, are possibly of Persian or W. Aryan origin, and may have relation to the seven rivers of the Panjab, the Sap'ta-Sindhu, which the Aryans met with in their course to the south, the river Indus being still known as the Sind'hu or Sind'h (Hitopadesa, p. 333). With the Persians, Ind or Hind and Hindu, as synonymous with black, has long been applied to the dark-coloured populations in the territories which are now comprised in British India. The Arab, the Persian, the Afghan, and Sikh, when speaking of the people of India, only call them 'black men;' and even in India the Mahomedan descendants of the Arab, Persian, Moghul, and Afghan conquerors use the same designation. 'Kala Admi,' literally black man, is ever in their mouths; and Hindus themselves, in their various tongues, likewise so distinguish themselves from all the fair foreigners amongst them. The African races, who were formerly brought to India as the household slaves or guards of native princes, invariably, when alluding to such of their own people as are born in the country, style them Hindi; and the Hindu merchants trafficking throughout Afghanistan, Central Asia, and Russia, are known to the people as Hindiki. Therefore, though a large part of the idol-worshipping people now-a-days call themselves Hindu, in this they are merely following the names given to them by their Arab, Persian, Afghan, Turk, Moghul, Tartar, and British rulers. Even Europeans have only of late habitually used this term, for at the beginning of the 19th century Gentoo was the everyday name employed, though it has since gradually fallen into disuse. It, also, was derived from a foreign people, the Portuguese, and was applied to the idol-worshippers, like the Gens of the Romans and Gentile of the Scriptures. It never, perhaps, reached much beyond the seaport towns, and if the better educated amongst the natives ever employed it, their doing so was merely in imitation of Europeans. And now, too, similarly, Brahmans and others, when alluding to the Telug race of their own countrymen, likewise style them Hindus.

Hindu is thus almost entirely a European conventional term, and does not represent a nation, a race, or a religion. The great bulk of the people known by this appellation are the descendants of Turanian, Scythian, and even Aryan immigrants, who in bygone ages are supposed to have left the cold north, some offshoots moving westward, and others to the south; for remnants of Turanian languages are found in Baluchistan, and the seat of the great Sanskrit-speaking people was long in Kashmir, proving that one great highway to the south had been down the valley of the Indus, through Kashmir and the Panjab. But between the valley of the Indus and that of the Brahmaputra, there are 20 or 30 passes in the Himalaya through which the northern races could stream to the genial south. Amongst the first of

these immigrants seemingly were Kolarian and Dravidian races, belonging to the Turanian family of mankind, bodies of whom seem to have spread themselves over the Peninsula. As to the date of their advent, however, history is silent, but there seems no doubt that great branches of the Scythic stock were occupants of India at the time that it was to a considerable extent conquered by the Sanskrit-speaking tribes of the Aryan family. In the north, the subjugation or ousting of the Turanians from all rank and power was so complete, that Sanskrit forms of speech became the languages of the country; and now, in the north, Kashmiri, Panjabi, Sindi, Gujerati, Mahrati, Hindustani, and the Bengali, all of them with a large admixture of Sanskrit, are sister tongues known as forms of Hindi. South of the Nerbadda, however, it is otherwise. Throughout the Peninsula the languages in use differ from the Sanskrit in grammar, and only admit Sanskrit words in the same way that the Anglo-Saxon admitted terms of law and civilisation from the Norman-French. At the present day, the south of India more largely represents the Turanian, and the north the Aryan race. The fair, yellow-coloured Aryans are, however, to be met with south even to Cape Comorin; but though mixing with the various Dravidian nations, races, and tribes for at least 3000 years, in physical form, complexion, intellect, and manners, the Brahmanical and other Aryan families are as distinct as when their forefathers first came from the north, it may be three or four thousand years ago. The great Aryan migration seems to have received its first check at the Vindhyan range, between the 14th and 8th centuries before the Christian era.

This powerful branch of the Aryans passed into Northern India between the 14th and 8th centuries before Christ. They brought with them the language of the Vedas; and as all Brahmans profess alike to recognise the authority of these sacred books, we witness the modern worshippers of Siva, Vishnu, and the maintainers of the Sankhya or Nyaya or Vedanta doctrines, all considering themselves and each other to be orthodox members of the Hindu community. It is this common recognition of that one set of religious books which is the sole bond of union amongst the descendants of the various races and tribes professing Hinduism or Brahmanism, who now people India. The Aryans seem to have brought with them a servile race, or to have had amongst them a social distinction between the noble and the common people, which has ever continued. As they conquered southwards, amongst the Turanian races whom they found in the country, they reduced the less civilised tribes to a state of predial slavery. They named them in fierce contempt, Dasa or slaves, and these formed the true servile race of Menu and other writers. Where the races who had preceded them retained their independence, these proud immigrants styled them M'hecha, a term which even to the present day is intended to comprise everything that is hateful or vile. But the immigrant Aryans found along the coasts of India also other races, different alike from the Scythic tribes and from the Aryans of the Vedas,—earlier colonizers or immigrants, probably from the west,—who had a civilisation of their own, and with whom the Pharoahs, and Solomon and Hiram, and the Cushite Arabs of Yemen

and the people of E. Africa, carried on a lucrative trade by sea. This people had extended down the coast to Cape Comorin, had crossed over to Ceylon, and crept up the Coromandel coast, till stopped by the Godavery and Mahanadi. All the Bengal Presidency and Central India was at that time thinly inhabited by a Turanian, Sakyan, or Mongol race, coming down from Tibet and Nepal. But so sparse was the population whom the Aryans encountered, that, in the Vedas, Agni is represented as the general of Nahusha, the first settler, that is, they cleared the ground by burning the forests, and some fine descriptions are given of the grandeur and terror of the sight. Up to the present day the religions of the prior occupants have never been other than local cults, and many of them even yet continue very barbarous. The higher civilisation of the East Aryans has enabled them to propagate their changing views, but the phases of their religious beliefs have been marked by four great epochs:—

I. The Vedic age, which was characterized by the worship of the gods of the elements, Agni, Indra, Varuna, and appears to have been current in the Panjab prior to the disappearance of the Saraswati in the sand.

II. The Brahmanic age, characterized by the worship of Brahma, and which seems to have prevailed between the disappearance of the Saraswati and the advent of Sakhya.

III. The Buddhist age, which was characterized by the pursuit of Nirvana, and seemingly prevailed from about B.C. 600 to A.D. 800 or 1000.

IV. The Brahmanical revival, which is characterized by the worship of incarnations of deities, and has prevailed from about A.D. 800 till now.

Vedic Age.—Among the gods whom the Vedic Aryans worshipped were Indra and Agni. Indra was the firmament, with all its phenomena. He alone held the thunderbolt, and was king over gods and men. Agni was the element of fire. All the other gods were but manifestations or other forms of these two. The relationship is evident between Agni and the sun, the Surya or Sura Savitri of the Vedas, and a female divinity. But Indra also is frequently identified with the sun; indeed, the twelve great deities, or Aditya, are but other names of the same god as presiding over the twelve months of the year. The Aditya most frequently invoked are Mitra, Varuna, Aryaman, and, in a lesser degree, Ansa, Daksha, Pushan, Bhaga, Vishnu, and Tvashtri. Pushan watches over roads and travellers; Tvashtri is the Vulcan or smith of the gods. Slight mention is made of Vishnu; but we have the germ of the legendary three steps, being apparently simply the rise, culmination, and setting of the sun. Among the inferior deities, the Marut or winds hold the first place; and next to them the Asvini, apparently twins or brothers, and sons of the sea (Sindhu), so that the Vedic Aryans evidently had settlements near some water, which they called a sea. The Asvini are almost invariably represented as having a triangular car with three wheels, drawn by asses; while their name appears to be derived from Aswa, a horse, which would seem to identify them with the two horses of the sun. The sakta or hymns addressed to them are richest of all in legend. Their connection with Indra (Jupiter), their patronage of mariners, their twin brotherhood, the two horses and stars found on their coins, identify them with the Grecian Dioscuri. In the Vedas, heaven, earth (Aditi and Pritivi), and ocean are rarely invoked, and the sun has com-

paratively few saktas. Occasional laudations are given to rivers, especially to the Saraswati; and this nature-worship extends to the cow, the wood used in the oblations, and even the vapa or sacrificial post. To Ushas, or the dawn, some of the most beautiful hymns in the Veda are addressed. All these deities are expressly declared to be 'the progeny of the heavens and the earth' (Wilson's Vedas, i. p. 276). No mention is made of the planets,—for Brihaspati is not a planet, but 'the lord of prayer,'—and the moon has not even a sakta.

The worship of the Vedic race is briefly but comprehensively described by themselves (Asht. I. Adhy. I. Sakta 6), where it is said the standers around associate with (Indra) the mighty (sun), the indestructive (fire), the moving (wind), and the lights that shine in the sky. The blessings they implore, says Professor Wilson, 'are for the most part of a temporal and personal description,—wealth, food, life, posterity, cattle, cows, and horses; protection against enemies, victory over them, and sometimes their destruction.' 'There are a few indications of a hope of immortality and of further happiness, but they are neither frequent, nor, in general, distinctly announced.' The only notice of an after life is found in the legend (for nothing is founded on it) of three brothers called Ribhus, who for their meritorious actions were made gods. Also, in one or two passages, Yama and his office of ruler of the dead are obscurely alluded to (Dr. Wilson, i. p. 25). Yama is usually connected with the Yamuna river. So monotonous and irreverent are the great bulk of their prayers (to Indra especially), that Professor Wilson could scarcely believe them to be in earnest. An instance of this is the hymn addressed to the goddess Anna (Anna devati, known in Bengal as Anna Purna), personified as Pita, or material food, by the rishi Agastya (see Wilson's Veda, ii. p. 192; Calcutta Review, No. 64, p. 112); and in a similar strain the soma plant is addressed. This plant, the *Sarcostemma brevistigma*, is found all the way from the mountains of Mazenderan to the Coromandel coast, and Viswamitra is described as passing the Sutlej and Beas to gather it. Bruised between two stones, mixed with milk or barley juice, and fermented, it formed a strong inebriating spirit. 'The purifying soma, like the sea rolling its waves, has poured forth songs, and hymns, and thoughts.'

The ritual of these old Aryans, as described in Professor Wilson's epitome of the saktas, comprehended offerings, prayer, and praise. The former are chiefly oblations and libations of clarified butter poured on the fire, and the expressed and fermented juice of this soma plant, presented in ladles to the deities invoked. It seems to have been sometimes sprinkled on the fire, sometimes on the ground, or rather on the kusa sacred grass strewed on the floor; and in all cases the residue was drunk by the assistants. There is no mention of any temple, or any reference to a public place of worship; the sacrificial chamber was always in the house of the worshipper, and it is clear that the worship was entirely domestic. The worshipper himself does not appear to have taken any part personally in the ceremony; and it was by priests—seven and sometimes sixteen—by whom the different ceremonial rites are performed, and by whom the mantras, or prayer and hymns, were recited (i. p. 24). The soma juice was the obla-

tion or libation of the Vedic worship (the honours of the Parsee), and allusions to it are met with in almost every page.

The following tabular statement of the number of saktas in the 500 hymns translated by Professor Wilson, addressed to each deity, sets their actual and relative worship clearly before us:—

Indra, . . . 178	Brihaspati, . . . 2	Sarasvati, . . . 1
Agni, . . . 147	Mitra, . . . 17	Vishnu (none
Asvini, . . . 28	Varuna, . . . 20	in the first
Marut, . . . 24	Usha, . . . 11	Ashtaka), . . . 2
Vayu, . . . 6	Surya or Savi-	
Rudra, . . . 3	tri, . . . 5	

This leaves less than sixty hymns for all the other members of the Vedic pantheon. Some of the divinities worshipped in Vedic times are not unknown to later systems, but at first perform very subordinate parts; whilst those deities who are the principal objects of worship of the present day are either wholly unnamed in the Veda, or are noticed in an inferior or different capacity. The names of Siva, of Durga, of Kali, of Rama, of Sita, of Krishna, of Radha, the present gods, so far as research has gone, do not occur in the Vedas. And the practice of the conquered races seems to have been to represent or regard local deities as identical with, or avatars or incarnations or other names of, the Vedic gods, who had already become objects of Aryan worship. The Vedas mention Rudra as the chief of the winds, collecting the clouds as a shepherd's dog does the sheep, and attending on his master Indra; in the Vedas he is the father of the winds; even in the Puranas he is of a very doubtful origin and identification; but in the present day everywhere amongst the Saiva Hindus he is identified with Siva. With the single exception of an epithet, Kapardi, 'with braided hair,' of doubtful significance, and applied also to another divinity, no other name applicable to Siva occurs, and there is not the slightest allusion to the lingam or phallus form in which, for the last ten centuries at least, he seems to have been almost exclusively worshipped in India; neither is there the slightest hint of another important feature of later Hinduism, the trimurti, or triune combination of Brahma, Vishnu, and Siva, as typified by the mystical syllable O'm (a-u-m), although, according to Creuzer (i. p. 26), the trimurti was the first element in the faith of the Hindus, and the second was the lingam. In this view Creuzer must have intended the mixture of creeds now current in India, for the whole Vedic faith was essentially a sabaistic and nature worship.

Religious Books.—Aryan Hindus have been remarkable amongst civilised races as abstaining from all historical writings; and a knowledge of the changes that have occurred in their beliefs has been obtained from their books of religion, philosophy, and fiction.

The Rig-Veda Sanhita is a collection of hymns of the ancient Aryans, addressed to the elements and powers of nature. Their age is various, prior and subsequent to the 15th century B.C. The Rig-Veda is of primary importance in the Hindu religion and mythology. The Yajur and Sama Vedas consist of hymns derived from the Rig, but re-arranged for religious purposes; and the fourth Veda, the Atharva, is of later date. The Brahmanas are ritualistic and liturgical compositions, chiefly in prose, and attached to the different mantras. They are later than the Vedic

hymns, and recognise one Great Being as the soul of the universe. Of a still later age are the Aranyakas and Upanishads, which form part of the collective, Brahmanas, and are principally philosophical. The Brahmanas recognise one Great Being as the soul of the universe. A golden egg was produced in the universal waters, from which in course of time came forth Prajapati, the progenitor, or the quiescent Universal Soul. Brahma took a creative form, as Brahma the Prajapati. From the Prajapati, or great progenitor, there was produced a daughter, and by her he was the father of the human race. The Upanishads, of which above 150 are known, are later, the oldest being about the 6th century B.C. They contain an examination of the mystic sense of the Vedas, and are free from Brahmanical exclusiveness. They have a monotheistic tendency.

The age of Menu was after that of the Brahmanas. Menu follows the golden egg theory, and he calls the active creator who was produced from it, Brahma, and Narayana. The latter name became subsequently exclusively applied to the Vishnu deity. The institutes of Menu show a great advancement of the Brahman caste.

The Mahabharata and the Ramayana are epic poems, which deal with the actions of men. Indra is mentioned; but Brahma, Siva, and Vishnu have become the gods, Brahma being but little mentioned; while in some passages Siva, in others Vishnu, is supreme, and the incarnations of Vishnu assume a permanent place. The Ramayana, by Valmiki, is supposed to be of the 5th century B.C., and its hero the royal Rama and his faithful wife Sita have been deified as incarnations of Vishnu and his consort. It is the older epic. The age of the Mahabharata is supposed to be in some of the six centuries B.C.; but it contains an interpolated episode, the Bhagavat Gita, which has been supposed to be of the 2d or 3d century A.D. In it Krishna is the Supreme, and bhakti or faith is enjoined.

These books belong to the Brahmana age. But a great reformer arose in the 6th century B.C., and the religious sects formed after him were prominent in India for about 1500 years, and are still the faiths of Burma, Tibet, Mongolia, Manchuria, Siam, Annam, and largely of Ceylon, China, and Japan. The reformer was Sakya Sinha, son of king Suddhodana of Magadha, and is known to history as Buddha.

Buddhism.—The valley of the Ganges was the cradle of Indian Buddhism, and Sakya Muni the founder of the new doctrines. As the champion of religious liberty and social equality, Sakya Muni attacked the Brahmins in their weakest and most vulnerable points,—in their impious assumption of all mediation between man and his Maker, and in their arrogant claims to hereditary priesthood. His boldness was successful, and before the end of his long career he had seen his principles zealously and successfully promulgated by his Brahman disciples, Sariputra, Mangalyana, Ananda, and Kasyapa, as well as by the Vaisya Katyayana and the Sudra Upali. At his death in B.C. 543, his doctrines had been firmly established, and the holiness of his mission was fully recognised by the eager claims preferred by kings and rulers for relics of their divine teacher. His ashes were distributed amongst eight cities, and the charcoal from the funeral pile was given to a ninth. He

had lived and preached from Champā and Rajagriha in the east, to Sravasti and Kausambi in the west. In the short space of 45 years, this wonderful man succeeded in establishing his own peculiar doctrines over the fairest districts of the Ganges, from the Delta to the neighbourhood of Agra and Cawnpur. This success was perhaps as much due to the early corrupt state of Brahmanism, as to the greater purity and more practical wisdom of his own system.

From his time until the end of the long reign of Ajatasatra, 519 B.C., the creed of Buddha advanced slowly but surely. This success was partly due to the politic admission of women, who in the east have always possessed much secret though not apparent influence over mankind. To most of them the words of Buddha preached comfort in this life, and hope in the next. To the young widow, the neglected wife, and the cast-off mistress, the Buddhist teachers offered an honourable career as nuns. Instead of the daily indignities to which they were subjected by grasping relatives, treacherous husbands, and faithless lords, the most miserable of the sex could now share, although still in a humble way, with the general respect accorded to all who had taken the vows. The Bhikshuni were indebted to Ananda's intercession with Sakya for their admission into the ranks of the Buddha community; and (see Cosma's Analysis of the Dulva, Res. As. Soc. Bengal, xx. p. 90; also Fo-kue-ki, chap. xvi. p. 101) the Pi-khieu-ni, or Bhikshuni, at Mathura, in token of their gratitude, paid their devotions chiefly to the stupa of Anan (Ananda), because he had besought Buddha that he would grant to women the liberty of embracing ascetic life. The observances required from the nuns are recorded in note 23, chap. xvi. of the Fo-kue-ki. The female ascetic even of a hundred years of age, however, was bound to respect a monk even in the first year of his ordination. It is related that Sakya's wife, after the first outburst of grief on seeing his return to her as an ascetic, herself became a Bhikshuni.

From its rise in the 6th century B.C., the doctrines of Buddha gradually spread over the whole of India. It was extended by Asoka to Kashmir and Kābul shortly after Alexander's invasion, and it was introduced into China about the beginning of the Christian era by 500 Kashmirian missionaries. In A.D. 400, when Fa Hian visited India, Buddhism was still the dominant religion, but the Vaishnava sect of modern Brahmanism, with a mixture of the old Aryan creed and the Buddhist faith, were already rising into consequence. In the middle of the 7th century, although the pilgrim Hiuen Tsaang found numerous temples of the Saiva, whose doctrines had been embraced by Skanda Gupta and the later princes of Pataliputra, yet Buddhism was still the prevailing religion of the people. But though the faith of Sakya lingered about the holy cities of Benares and Gaya for two or three centuries later, it was no longer the honoured religion of kings and princes, protected by the strong arm of power, but the persecuted heresy of a weaker party, who were forced to hide their images under ground, and were ultimately expelled from their monasteries by fire. In 1835, Major Cunningham excavated numerous Buddhist images at Sarnath near Benares, all of which had evidently been purposely hidden under ground. He found quantities of

ashes also, and there could be no doubt that the buildings had been destroyed by fire; and Major Kittoe, who subsequently made further excavations, was of the same opinion. The Buddhist religion has long been extinct in British India. Its last remnants were extinguished, in blood and violence, about the 14th century, dying out about Trichinopoly and along the coast-line from Vizianagram to Masulipatam. But it still flourishes in its Hinayana and Mahayana forms, in the countries on its north and north-east borders, in Nepal and Tibet, in Mongolia and Manchuria, in Ava, Ceylon, and China, and amongst the Indo-Chinese nations of Annam, Siam, and Japan; and its followers far outnumber those of all other existing creeds except the Christian.

The Buddhist faith was pre-eminently a religion of mercy and peace, of charity and benevolence. In the topes dedicated to the celestial Buddha, Adinath, the invisible being who pervaded all space, no deposit was made; but the divine Spirit, who is 'Light,' was supposed to occupy the interior, and was typified on the outside by a pair of eyes, placed on each of the four sides either of the base or of the crown of the edifice. But in ages of strife and violence, of deifying mortals and of arrogant assumptions of an ignorant priesthood, a creed that taught gentleness and meekness and kindness to living creatures must have exercised a great influence over the community,—must early have gained many converts amongst the peaceable and good, and largely leavened the minds even of those who did not openly become converts; and amongst this class must be included the entire populations from the primeval land east of the Oxus to China and Japan in the farthest east, to Singapore and Ceylon in the extreme south. For ten centuries it had been the prevailing religion of India; but when the unwritten Tartar faith became corrupt and feeble, Brahmanism was revived, mixed with the worship of new gods, a Siva and a Vishnu, and every form of absurd fetishism gathered from local idolatries and superstitions. It is this mixture of several creeds which Europeans now style Hinduism, and its followers Hindus. It is found amongst the people in every variety of belief,—from the mildest spirit and demon worship and recognition of numerous forms of gods and their idols, to a distinct theism; from the grossest ignorance and superstition, to the most refined speculativeness; performed and associated with bloody and most inhuman rites, and again followed with the greatest tenderness for animal life.

**Brahmanic Revival.*—In the later hymns of the Vedas can be traced the origin of the Vishnu worship, and the setting aside of Indra. But the foreign Siva and Bhavani had come in with the Sakæ, and mingled in their worshippings, until the doctrines of Buddha, himself a Sakyan, were promulgated, and held their own for more than a thousand years, until, between the 5th and 12th centuries of the Christian era, a host of new divinities, Vishnu, Siva, Durga, Kali, Ravana, Krishna, Ganesha, Kartikeya, prevailed over a better faith than their own, and up to the present day enslave and degrade the Hindu mind.

The Puranas, eighteen in number, are more recent books. Their age has been supposed to be from the 2d to the 16th century A.D., though their name means old. These are all in verse; give a

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cosmogony, celebrate the powers and works of the gods, and give the history of the Solar and Lunar dynasties who ruled in Northern India; and to them have been appended 18 Upa Puranas. Later than these are the Tantras, which are religious and magical works, that give prominence to the female energy of the deity, his active nature being personified in the person of his sakti or wife, each of whom has a gentle and a fierce form, as Radha, Devi, Uma, Gauri, Durga, and Kali, and these are worshipped both symbolically and in the actual woman.

In the Puranas the Vedic deities are forgotten, and marvellous legends have gathered round the favourite divinities, full of wild imaginings, and evidencing a corrupt state of society and religion. Vishnu and Siva have obtained respective sects as followers. Krishna has become the object of a sensuous, joyous worship; the worship of Devi, the consort of Siva, has become established, and the foundation has been laid of the obscene and bloody rites afterwards developed in the Tantras. The Puranas and the Tantras are the religious books of the Hinduism of the present day. The Veda is a mere name: its gods, and rites, and language are only known to the learned, and the modern system is quite at variance with the Vedic writings,—the Puranas and later writings being the great authorities of modern Hinduism. Their mythology and legends fill the popular mind, and mould its thoughts. The great epic poems, the Mahabharata and the Ramayana, with their heroes, the Pandava, the Kaurava, Rama and his wife Sita, Hanuman, and Ravana, are listened to with delight; and the stories about Krishna, from his infancy till his death, are the never-ending source of joy to the young. The mild and gentle Rama, 'the husband of one wife,' pure in thought and noble in action, and his faithful wife Sita, are, however, objects of the devotion of many, and theirs is the least degrading of the many forms of Hindu worship.

Philosophies.—Concurrent with the ritualistic worship of the modern Hindu gods and goddesses, there are six schools of philosophy,—the Nyaya, the Vaisheshika, the Sankhya, the Yoga, the Purva mimansa, and Uttara mimansa. All of them have the same final object,—the emancipation of the soul from future birth and existence, and its absorption into the supreme soul of the universe. They are supposed to have had their origin between the 5th and 3d centuries B.C. The Nyaya and Vaisheshika recognise a Supreme Being; the Yoga is theistic; the Sankhya, atheistic; the two Mimansas are the Vedanta. The object of these two Vedanta schools is to teach the art of reasoning, with a view to aid in the interpretation of the Vedas. The Purva mimansa is generally known as the Mimansa, and the Uttara mimansa as the Vedanta; and the principal doctrines of the latter are that the Supreme Being is the omniscient and omnipotent cause of the existence, continuance, and dissolution of the universe. The Vedanta or Mimansa philosophy is treated as a scholastic philosophy, which, basing itself on the sacred books and the popular religion, seeks for unity of thought only as a means of introducing order amid the divine personages and legends, and has sought to give a spiritual import, a sort of new birth, to the gods of Brahmanism. In the Vedanta philosophy, Brahma is placed in the foreground as

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the soul of the universe, the primal being, which alone has true existence. To this school, not matter only was a semblance, even the soul was a transient phenomenon. The Sankhya philosophy is contrasted with it, as a purely pantheistic system. In this view this philosophy has broken completely with the popular creed, and with the doctrines of the Vedas and the Brahmanas. The Sankhya philosophy occupies itself more with life in manifestation, therefore especially with the life of the individual spirit connected by its body to the outward world. Both of these leave the Vedas unassailed, nay, the whole Brahmanic religion, in so far as it concerns rites and customs.

A census was taken of the people of British India in 1881, and the numbers following these creeds were found to be 187,957,450, out of a total population of 253,891,821 souls:—

Hindu Population, census 1881.

	Males.	Females.	Total.
British Territory—			
Ajmir,	202,326	173,803	376,029
Assam,	1,580,458	1,481,690	3,062,148
Bengal,	22,578,544	22,874,262	45,452,806
Berar,	1,252,541	1,175,118	2,427,659
Bombay,	6,291,598	6,016,583	12,308,181
British Burma,	73,929	14,248	88,177
Central Provinces,	3,700,467	3,617,383	7,317,850
Coorg,	90,705	71,784	162,489
Madras,	14,104,051	14,397,727	28,491,778
N. W. Provinces,	19,815,098	18,240,206	38,055,304
Panjab,	3,883,915	3,246,613	7,130,528
Tot. Brit. Territory,	75,572,432	71,302,883	146,875,315
Feudatory States in—			
Bombay,	2,842,559	2,683,844	5,526,403
Central Provinces,	705,612	679,068	1,384,680
N. W. Provinces,	201,726	240,001	441,727
Panjab,	1,160,125	961,042	2,121,167
Tot. Feudatory States,	4,910,022	4,565,155	9,475,177
Tot. British Territory, incl. Feud. States,	78,542,454	75,868,038	154,410,492
Native States—			
Baroda,	909,946	882,920	1,792,866
Central India,	4,130,018	3,070,378	7,200,396
Cochin,	215,637	213,067	428,704
Hyderabad,	4,517,812	4,375,309	8,893,121
Mysore,	1,067,814	1,088,522	2,156,336
Rajputana,	4,792,774	4,046,469	8,839,243
Travancore,	872,770	882,840	1,755,610
Total Native States,	17,466,773	16,000,185	33,466,958
Grand total,	96,009,227	91,928,223	187,937,450
Total population,	129,941,851	123,949,970	253,891,821

Christianity and Mahomedanism have modified the doctrines of the Aryan Hindus. Since Buddhism disappeared from India, its nations have been conquered by races professing creeds with followers nearly as numerous as Buddhism had ever acquired. Rapid as was the progress of Buddhism, the gentle but steady swell of its current shrinks into nothing before the sweeping flood of Mahomedanism, which in a few years spread over one-half of the civilised world, from the Atlantic Ocean to the swampy fens of the Oxus, to China, and to the Eastern Archipelago. From the 11th century, when the inroads into India of Mahomedans began, up to the present time, when they too, as a ruling race in India, have in their turn almost disappeared, Semitic Arabs, Aryan Persians, Scythic Tartars, Turk and Mongols, and Anglo-Saxons, have successively swayed the destinies of the Hindu races, and each of the new-comers has to some extent

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modified the beliefs and social customs of the conquered. Legislation by the Mahomedan rulers, and after them by the British, has effected many changes. Repulsive forms of fanatical penance are phenomena seldom seen; the immolation of widows is a criminal occurrence; ghat murder, or the exposure of the sick and dying upon the banks of sacred rivers, is matter of past history; open infanticide has been in a great measure suppressed. Further changes have been retarded by the circumstance that the Mahomedan and the Christian came amongst them as soldiers, with all the licence to be found in camps, and the contempt for strange things which youth engenders. Nevertheless the great bulk of the 23 millions who follow Mahomedanism in Bengal and Assam, as also its followers who speak the Malay language, are descendants from idol-worshipping races; while in N.W. India many Rajput and Jat tribes have also embraced the faith of Islam; and the Hindu Nanak, the founder of the Sikh faith, and Kabir and other reformers, drew their views prominently from the Mahomedans. Christianity has been preached in India since the early years of the era, and there has lately been a belief that parts of the ritual of the worship of Krishna had been taken from Christian texts, but the Christians throughout the E. Indies, China, and the Archipelago may not as yet exceed three millions.

Since the 15th century, Christian missionaries of all sects have been labouring in their vocation, with some success. But this has been largely owing to the steady increase of schools for secular instruction, which have every year been on the increase, and, since the middle of the 19th century, are crowded with the youth of all races, sects, castes, and ranks. In this respect every teacher of English is a missionary, for it is impossible for the youth of India, if educated under Christian teachers by means of a Christian literature, to be otherwise than imbued with the doctrines of Christians, whatever their professions may be. In the 19th century, the first reforming sect that arose was a theistic body in Calcutta, and many who have received the higher education have joined it, or have formed other sects with similar views. But even in the case of Hindus who have had no English education, and have never heard the voice of the missionary, such are receiving instruction from others of their own people who have been so taught; and the mass has been so leavened, that the great tendency amongst youthful inquiring minds is to accept some form of monotheism,—either to acknowledge one of their own deities, whether Vishnu or Siva, as the Lord of all, or adopt an ideal Supreme Being of their own creation, whom they clothe with attributes, purer, more just, and more worthy of reverence than any god which their religious books possess.

Hinduism as it is.—In approaching this part of the subject, it may be mentioned that the mythology of India has done much to explain that of Greece and Scandinavia, as will be seen by the following list of the more prominent Hindu deities of the present day and their principal analogues:—

Agni, . . .	Vulcan, fire, ignis.
Swaha, . . .	Vesta, his wife.
Aswini-Kumara, . .	Castor and Pollux.
Aruna, . . .	Aurora.
Atadeva, . . .	Diana.
Kuvera, . . .	Plutus, the god of riches.

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Indra, . . .	God of firmament,—Jupiter.
Varuna, . . .	God of water,—Neptune, Ouranos.
Prithivi, . . .	Goddess of earth,—Cybele.
Viswakarma, . . .	Architect of gods,—Vulcan.
Surya or Arka, . .	The sun,—Sol.
Heraclia, . . .	A Hindu deity,—Hercules.
Aswiculapa, . . .	Æsculapius?—Genii.
Vayu, . . .	Æolus.
Vaitarini, . . .	The river Styx.
Durga, . . .	Juno.
Narada, . . .	God of music,—Mercury.
Krishna, . . .	Apollo.
Bhawani, . . .	Venus or Minerva Musica.
Kali or Durga, . .	Proserpine.
Ganesha, . . .	A male Minerva.
Kartikaya or Skanda, . . .	God of war,—Mars.
Kama, . . .	God of love,—Cupid.
Hanuman, son of Pavana, . . .	The monkey god,—Pan.
Rama, . . .	The god of wine,—Bacchus.
Sri, Lakshmi, . . .	Ceres.
Anna Purna, . . .	Anna Perenna.

Sects.—The changes in the religions of the Aryan Hindus during the past nineteen centuries have been continuous. Perhaps the earliest indications of coming changes were given in the third division of the Vedas, known as the Upanishads, which discuss the nature of the deity, the nature of the soul, and the connection of mind and matter. They contain the beginnings of the metaphysical inquiry, which ended in the full development of Hindu philosophy. The oldest of these books is supposed to be about the 2d century B.C.

The great Saiva reformer was Sankaracharya, who lived in the 8th or 9th century. He was the teacher of the Vedanta philosophy; he founded the sect of Smartha Brahmins, and has been regarded as an incarnation of Siva. His follower, Anandagiri, wrote the Sankara Vijaya about the 10th century. The worshippers of Siva regard that deity as the Supreme: and his consort Parvati, in her numerous forms of Devi, Durga, Bhawani, etc., has many worshippers. These two are pre-eminently designated Mahadeo and Mahadevi.

Vishnu and his consort Lakshmi are equally regarded by their followers as Supreme, and might have the same designations, but neither under these names nor in any of their many incarnations are they so honoured. A few of the gods of the times prior to the Christian era continue to be invoked,—amongst them, Indra the god of the firmament, Agni the god of fire, Kama the god of love, and Kuvera the analogue of Pluto; but the Diti, Aditi, Aditya, Rakshasa, and others of the Vedas have become myths, and the chief deities of the modern Hindus are Siva and Vishnu with their consorts; Rama and Rama-Chandra, and Bala Rama, Ganesh, Garuda, Hanuman, Jaganatha, Kandoba, Krishna, Kartikaya, god of war, the phallic lingam, Nandi the bull, Virabadhra, and Vitoba.

Ramanuja was a Vaishnava philosopher, who put forward the Viçṣṭadwaita system, and the sect who follow his teachings worship Rama and Sita. The Adwaita is a monad doctrine, which acknowledges the reality of spiritual existence only. Dwaita, or the doctrine of duality, distinguishes two principles in creation, spirit and matter.

Ramanand (A.D. 1350?), the follower of Ramanuja, was the first to admit low caste people as his disciples, one of whom was Rai Das, another was Kabir, and the Kabir Panthi sect gave rise to the Nanak Shahi about A.D. 1449.

Chaitanya, a Vaishnava reformer in Bengal in the 16th century, was deemed an incarnation of Krishna. He too admitted all classes as his disciples.

Charandas, a merchant of Dehli, lived in the time of the 2d Akbar (A.D. 1757). His first disciple was his sister, Sahaji Bai, who was a distinguished writer. The sect worship Krishna and Radha.

Mira Bai, wife of Lakha, rana of Udaipur in the reign of Akbar, was of the Vaishnava sect, and a distinguished writer.

Jayadeva, of the 12th or 13th centuries, wrote the Gita Govinda, an erotic poem on the early life of Krishna.

Five great sects exclusively worship a single deity, and one recognises the five divinities; these are—

1. *Saiva*, worshippers of Siva in his numerous forms, who, however, worship Siva and Parvati or Bhawani conjointly.
2. *Vaishnava*, who worship Vishnu.
3. *Surya*, who worship Surya or the sun.
4. *Ganapatya*, who worship Ganesha.
5. *Sakta*, who exclusively worship Bhawani or Parvati, the sakti or female energy of Siva.
6. *Bhagavata*, who recognise all divinities equally.

The fourth and fifth are subdivisions or ramifications of the first, or Saiva, of which may be traced these distinctions:—1. Saiva proper, meaning the worshippers of Siva and Parvati conjointly. 2. Lingi or Lingaet, the adorers of Siva or his phallic type separately, and these are a very strict and rigid sect. 3. Sakta, the adorers of the yoni of Bhawani or her symbol separately. 4. The Ganapatya, the exclusive worshippers of Ganesha, the first-born of Mahadeva and Parvati.

The second grand sect, or Vaishnava, is variously divided and subdivided. First, or division of Gocalastha, or worshippers of Gocal or Krishna, is subdivided into three:—

1. Exclusively worship Krishna as Vishnu himself: this is generally deemed the true and orthodox Vaishnava.
2. Exclusively worship Radha, as the sakti of Krishna or Vishnu: this sect is called Radha Valabhi.
3. Worship Krishna and Radha conjointly.

Second, or division of Ramanuj, or worshippers of Ramachandra, is in like manner subdivided into three:—

1. Worship Rama only.
2. Worship Sita only as his sakti.
3. Worship both Rama and Sita conjointly.

The Vaishnava of the present day, though nominally worshippers of Vishnu, are thus in fact votaries of deified heroes. The Gocalastha (one branch of the sect) adore Krishna, while the followers of Ramanuja worship Ramachandra. Both have again branched into three sects; one consists in the exclusive worshippers of Krishna, and those only are deemed true and orthodox Vaishnava; another joins Krishna's favourite, Radha, with the hero; a third, called Radha-valabhi, adores Radha only, considering her as the sakti or active power of Vishnu. The followers of these last-mentioned sects are said to have adopted the singular practice of presenting to their own wives the oblations intended for the goddess; and those among them who follow the left-handed path are said to require their wives to be naked when attending them at their devotions.

Among the Ramanuj some worship Rama only, and others both Rama and Sita; none of them practise any indecent mode of worship. And they all, like the Gocalastha, as well as the followers of the Bhagavata, delineate on their foreheads a double upright line with chalk, or with sandal-wood, and a red circle with red sanders wood, or with turmeric and lime; but the Ramanuj add an upright red line in the middle of the double white one.

The Saiva sect are all worshippers of Siva and Bhawani conjointly; and they adore the linga or compound type of this god and goddess, as the Vaishnava do the image of Lakshmi-Narayana. The exclusive adorers of the goddess Bhawani are the Sakta sect. In this last-mentioned sect there is said to be a right-handed and decent path, and left-handed and indecent mode of worship; and both Major Moor and Professor Wilson allude to the licentious character of the latter form, a feature certainly quite unknown in the Southern India of the present day. The left-handed form of worship of the several sects, especially that of the Sakta, is founded on the Tantras, which are for this reason held in disesteem.

Sectarian Differences.—The great point of difference amongst the sectaries is as to the claims of respective deities to be regarded as the first cause. Few Brahmans of learning, if they have any religion at all, will acknowledge themselves to belong to any of the popular divisions of the Hindu faith, although, as a matter of simple preference, they more especially worship some individual deity as their chosen or Ishta Devata. They refer also to the Vedas, the books of law, the Puranas, and Tantras, as containing the only ritual which they recognise, and regard all practices not derived from those sources as irregular and profane. These deities have their different avatars or incarnations, in all of which, except that of the sakti, themselves, they have their sakti (wives) or energies of their attributes. These have again ramified into numerous names and forms. The following is an enumeration of the several sectaries of each class, and to them we refer for separate notices of their origin and tenets:—

Vaishnava Sects.

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|---|--|
| 1. Ramanuja, or Sri Sampradayi, or Sri Vaishnava. | 10. Mira Bai. |
| 2. Ramanandi or Ramavat. | 11. Madhavachari or Brahma Sampradayi. |
| 3. Kabir Panthi. | 12. Nimawat or Sanakadi Sampradayi. |
| 4. Khaki. | 13. Vaishnava of Bengal. |
| 5. Maluk Dasi. | 14. Radha Valabhi. |
| 6. Dadhu Panthi. | 15. Sak'hi Bhava. |
| 7. Raya Dasi or Rai Dasi. | 16. Charan Dasi. |
| 8. Senai or Sena Panthi. | 17. Harischandi. |
| 9. Valabhachari or Rudra Sampradayi. | 18. Sadhna Panthi. |
| | 19. Madhavi. |
| | 20. Sanyasi, Vairagi, Naga. |

Saiva Sects.

- | | |
|--|---|
| 1. Dandi and Dasnami. | 6. Gudara. |
| 2. Jogi or Yogi. | 7. Ruk'hara, Suk'hara, and Uk'hara. |
| 3. Jungama or Sri Saiva. | 8. Kara Lingi. |
| 4. Paramahansa. | 9. Sanyasi, Brahmachari, Avadhuta Naga. |
| 5. Urdhabah'u, Akas Muk'hi and Nak'hi. | |

Sakta Sects.

- | | |
|------------------------|----------------|
| 1. Dakshini or Bhakta. | 3. Kanchuliyh. |
| 2. Vami or Vamachari. | 4. Karari. |

Miscellaneous Sects.

- | | |
|---|-------------------|
| 1. Ganapatya. | 4. Jaina. |
| 2. Saurapatya or Saura. | a. Digambara. |
| 3. Nanik Shahl, of seven classes, viz.: | b. Svetambara. |
| a. Udasi. | c. Yati. |
| b. Ganjbakshi. | d. Sravaka. |
| c. Ramrayi. | 5. Baba Iali. |
| d. Suthra Shahl. | 6. Pran Nathi. |
| e. Govind Sinhi. | 7. Sadh. |
| f. Nirmala. | 8. Satnami. |
| g. Naga. | 9. Siva Narayani. |
| | 10. Sunyavadi. |

Most of these comprise a number of subdivisions, and, besides acknowledged classifications, many individual ascetics are to be found all over India, who can scarcely be included within the limits of any of them, exercising a sort of independence both in thought and act, and attached very loosely if at all to any of the popular schismatical sects. Some of the popular works of the Hindus adopt a different classification, and allude to 96 prashada or heresies, which are thus arranged, viz.:—Amongst the Brahmins, 24; Sanyasi, 12; Viragi, 12; Saura, 18; Jangama, 18; Jogi, 12. Also, new gods or objects of worship are in constant formation, and are believed in by great masses of the people, though only a bit of paper, a cart-wheel, and other oddities. There is a temple of the goddess Elamma about a mile distant from the town of Jat, in the Jat jaghir. An annual fair is held in honour of this idol, at which about 10,000 people assemble. About the year 1860, a Mali or gardener set up the idol, stating that it had appeared there of its own accord. Both men and women visit the temple and worship the idol. The worshippers, before commencing the worship, strip naked, apply powdered sandal-wood to their whole bodies, put on the ornaments they may have, hold a small branch of the nim tree in their folded hands, and leave their places of residence to visit the idol. After visiting the idol, they go round the temple for a certain number of times. They then leave the temple to bathe in a neighbouring tank. After bathing, they return to the temple, worship the idol, and return home. When Mr. Chapman was collector of Satara, he punished some of the naked worshippers.

Sakti.—The Hindu goddesses are uniformly represented as the subordinate powers of their respective lords. The term is from the Sanskrit, meaning power, strength; thus Lakshmi, the consort of Vishnu, the preserver, is the goddess of abundance and prosperity; Bhawani, the wife of Siva, is the general power of fecundity; and Saraswati, whose husband was the creator, Brahma, possesses the powers of imagination and invention, which may justly be termed creative. She is therefore adored as the patroness of the fine arts, especially of music and rhetoric; as the inventress of the Sanskrit language, of the Devanagiri writing characters, and of the sciences which writing perpetuates; so that her attributes correspond with those of Minerva Musica of Greece or Italy, who invented the flute, and presided over literature.

Mixings.—Saivism and Vaishnavism described above are the common everyday religions of the bulk of the Hindu populations. But the internal beliefs of the worshippers have no such community, and their various tenets must be sought for under the history of their several sects. A Saiva sect, the Satnami, profess to adore the true name, the one God; but they nevertheless recog-

nise the whole Hindu pantheon, and pay reverence to what they consider manifestations of his nature visible in the avatars, particularly Rama and Krishna. The Sadh, on the other hand, utterly reject all kinds of idolatry; are pure deists, with a simple worship. Between these unitarian sects and such as adore every deity, there is the utmost diversity of theory and practice; and the fusing of their creeds, doctrines, and customs is continually going on. Major Moor tells of a Mahomedan butcher at Poona, who occasionally supplied the Residency with meat. Being asked if he would kill a calf, he started back with horror at the proposal, ejaculating a prayer to be forgiven for having even heard it. Many Mahomedans of India borrow from the Hindu ceremonies that are celebrated with festivity. They take an active part in the gambols of the Holi, and even solicit the favours of the Indian Plutus at the Diwali. Many Hindus, on the other hand, join in the festival of the Maharram. The bridal procession of the Mahomedans on the fourth day, with all the sport and gambols of the Chaut'hi, is evidently copied from the similar custom of the Hindus. The Mahomedans have adopted the premature marriage of infants, and Hindus largely imitate the Mahomedan seclusion of their wives (Colebrooke, *As. Res.* vii. p. 307). A Mahomedan is forbidden to eat meat which has not been killed by one of the faithful, who is directed to 'halal' or sanctify the animal by turning its face toward Mecca, and, while the blood is ejected, to repeat a short prayer. Many Mahrattas and other Hindus, pleased with the ceremony, bring their sheep, fowls, etc., to Mahomedans to be made 'halal,' and then eat them with increased satisfaction.

Vahan or Vehicles.—Several animals are appropriated as the vahan or vehicles to the mythological personages of modern Hinduism. The swan, the eagle, and the bull appertain respectively to Brahma, Vishnu, and Siva, and are severally denominated Hanasa, Garuda, and Nandi. Ganesha, eldest son of Siva and Parvati, the elephant-headed god of prudence and policy, rides a rat, supposed to be a very sagacious animal; Kartika, their second son, generalissimo of the celestial armies, mounts on a peacock. Indra, the powerful regent of the firmament, the Jupiter Pluvius of the Hindus, rides the elephant Airavata, symbolical of might. Varuna, genius of the waters, bestrides a fish; as doth also Ganga, the prime goddess of rivers. Kama Deva, the god of love, is carried by a lory or parrot; Agni, god of fire, by an ardent ram.

Village Deities.—Every hamlet has its own object of adoration, always supposed to be a goddess, and the idol is generally a black stone or piece of wood. Amongst names given to it in Southern India are—

Al.
Ankal-Amma.
Poni-Amma, gold mother.
Kani-Amma.
Yogatal.
Mutialamma, pearl mother.
Tripura-sundari, the beautiful of three cities.
Paleri-Amma, or Periy-Amma, or great goddess.
Dandumai,
Mallamma.
Ohinnamma.
Ammanamma.

Osuramma.
Sellamma.
Yellamma.
Padavettu-Amma.
Tulukaa-Amma.
Muttumari.
Mari-Amman.
Potesaramma.
Karikatta.
Tanthoniamma.
Ohundeswari.
Vadivatta.
Nagattamma.

A pujali or pujari, a worshipping priest of the Sudra caste, is appointed for her daily worship. He anoints her daily, and puts ashes on her head,—really on the top of the stone, for it is not an image, being entirely without shape, a mere stone from the neighbouring brook or river. In a small pot he cooks rice, which he collects from the villagers in turn, presents it to the idol, and then takes it to his own home. He breaks a cocoanut in front of the idol, to which he offers it. But the one half he keeps for himself, and gives the other to the families from whom he collected the fruit. The villagers make vows to their goddess to offer up to her fowls and sheep in sacrifice, if she will fulfil their desires. Once a-year they collect money by subscription, and celebrate a feast in honour of their goddess, during which sheep and fowls are largely sacrificed. The Sudra Hindus and the entire servile and predial tribes in the south of India have the fullest faith in their respective village goddesses. When they or their children are overtaken by sickness, they seek the idol and consult the pujari, who sings hymns, affects to hear the Amman's voice, and then announces to the worshipper the offering that must be presented. If cholera break out, it is not unusual for some neighbouring village deity suddenly to rise into great importance, and the sacrificial rite is then almost unceasingly performed. The Hindus, too, have even personified this pestilence into a goddess, whom they name Maha-Kali, and believe that if they neglect her worship she destroys them by the disease. Indeed, gods are everywhere in process of establishment, and small-pox as well as cholera have thus been personified. Maha-Kali of Ujjain is a cholera goddess, and Mari-Amman or Amur of the Tamils is a small-pox deity. When a person is attacked with small-pox, they believe that the goddess has taken possession of the sick man. While in the house, the sexes remain apart until the sick person has recovered, and been purified by ablution. They place the leaves of the margosa tree beside the sick person, because the goddess is supposed to delight in this tree. They give cooling food, but employ neither internal nor external remedies, in reverence for the divinity. The women of the household offer rice-flour mixed with jagari or coarse sugar and black gram (Pairu, TAM.; Pesalu, TEL.) before the patient in honour of the goddess, and afterwards distribute offerings to Sudras and others. On the seventh day, i.e. what medical men call the fifteenth day, the invalid is bathed in cold water, and the whole body rubbed with a pasty mixture of leaves of the margosa (melia and azadirachta) mixed with turmeric, and on the same day rice mixed with curds are distributed to Sudras. If in the virulence of the disease an eye be lost, it is attributed to something having been done displeasing to the goddess. The goddess, indeed, is supposed to appear in three forms,—as Tatta amavaru or Chinnamavaru, i.e. small goddess or measles; Peddamavaru, or great goddess or smallpox; and Pairamavaru, or goddess of green gram (Phaseolus mungo),—the two first of which are most feared.

Devil and Spirit Worship.—Every Hindu work containing allusions to native life, says Dr. Caldwell, and the dictionaries of all the Hindu tongues, prove the general prevalence of a belief in the existence of malicious or mischievous demons, in

demoniacal inflictions and possessions, and in the power of exorcisms. Spirit houses of Mysore are little sheds erected over white-ant hills. In Berar, when the Gonds fell a wood on a hill-side, they leave a little clump to serve as a refuge for the elf or spirit whom they have dislodged. The Brahmanic worship of the spirit of the dead is shown by their bringing back to the house the dead person's soul, supposed to have lost its home by the body's death. A stone or some such object is picked up at the grave, and carried reverentially back to the house, where it is worshipped for a few days, and then decently disposed of. The demons worshipped are multitudinous. Chand Khan of the Dekhan is one of them. His tomb is worshipped on one bastion of every mud fort. The legend regarding him is to the effect that there was a difficulty encountered in the erection of a bastion, and he was sacrificed and buried to appease the obstructing demon. See Demon; Devil; Shanar.

Unions of any sort, especially of waters, are held sacred by Hindus, and above all the union of the Ganga and Jumna near Allahabad,—the latter river having previously received the Saraswati below Dehli, so that in fact all three unite at this famed sangam or confluence. But the Hindu poet feigns a subterranean flow of the Saraswati, and a mystical union at the sacred point, where bathing is deemed peculiarly efficacious. Major Moor once saw (p. 429) at Poona a well-modelled group in clay, where Radha's locks, tripartite, were plaited into the mystical Triveni by the amorous Krishna, who sat rapturously admiring the work of his hands. The Triveni, or three-plaited locks, in Hindu mythology, is the mystical union of these three sacred rivers, the Ganges, Jumna, and Saraswati, severally the consorts or energies of the three great powers. Coleman also says (pp. 394, 398) that the Triveni, or three-plaited locks, is allegorical of the holy rivers Ganga (or Ganges), Yamuna (or Jumna), which join near Allahabad, the Saraswati being supposed to join the other two under ground. A Hindu dying near the imagined confluence of the three streams, or even of those of the Ganga and Yamuna, attains immediate beatitude; consequently self or self-permitted immolation, sati, etc., were meritorious on this peculiarly holy spot, and multitudes of pilgrims annually resort there to bathe. Other rivers are held sacred by Hindus, viz. the Godavery, the Sindhu or Indus, the Krishna or Kistna, the Cauvery, and the Brahmaputra. It is, however, the Ganges that is most revered. The Hindu longs to perform his ablutions in its streams; its waters are carried to remote distances, to be sold to persons who wish to perform with it their sacred rites; many men and women formerly drowned themselves in the sacred stream, hoping by that means to reach their heavenly abode; the bodies of those dying far and near are sent to be committed to its bosom; and from still greater distances Hindus send incriminated bones of deceased relatives to be cast into the waters.

The union of the palmyra and the Urostigma religiosa is deemed holy, and their orchard is married to its adjacent well before its fruit can be partaken of.

The Hindus also reverence the impressions of feet. On the top of Adam's Peak in Ceylon is a natural hollow, artificially enlarged, said to be the impression of a foot of Buddha, as Buddhists

say, but called by the Hindus, Sripada or Sripad, meaning the divine footstep, Vishnu having, they say, alighted on that spot in his avatara of Rama; although Mahomedans and Christians have also claimed that footmark as of their religious relics. Hindus make pilgrimages to the Sripad in Ceylon, and in other places where similar proofs of an avatar or descent have been discovered.

The Mahrattas make images in honour of deceased ancestors, and of their guru or spiritual instructors, as Iares, or Penates, or Lemures. Nat and Vira (Nat'ha, lord; Vira, brave) and Bharava are epithets applied to such domestic images.

Their leaf-platters, used as plates, are usually made of the leaves of the mango, the jamoon, *Syzygium jambolanum*, the banyan, and pipal trees. Part of the ceremony of a vow of friendship, amongst Hindus, consists in dividing a bel or larger wood-apple, half of which is kept by each party, and from this compact is called bel bandar. Every Hindu, whatever his avocation, on his new year's day worships the object or implement by which he obtains his living, or, in western phrase, blesses and consecrates it. During the Durga puja, Durga is worshipped in the form of a water-pot. It is called Ghita-puja, also Ghatasthapana. The water-pot being placed after certain invocations, Durga is supposed to enter it, and she is then worshipped. The bamboo is worshipped by the Tiperah people, the Cachari, and the Garo. They stick a bamboo in the ground during one of their religious festivals, and worship it. The Kol of Central India worship the sal tree (*Vatica robusta*).

Many trees are held to be sacred, some to Siva, some to Vishnu, some to both.

To both are the *Artemisia austriaca*, *Calophyllum inophyllum*, *Chrysanthemum indicum*, *Euonymus tinnens*, *Gracillara spinosa*, *Guetarda speciosa*, *Ixora bantluca*, *Jasminum undulatum*, *Nerium odorum*, *Origanum marjorana*, *Sarcostemma brevistigma*. Sacred to Vishnu, *Azadirachta indica*, *Ocimum sanctum*.

Sacred to Lakshmi, *Nelumbium speciosum*.

Sacred to Siva, *Bauhinia parviflora*, *Azadirachta indica*, *Cassalpinia pulcherrima*, *Crataeva religiosa*, *Jonesia asoca*, *Phyllanthus emblica*.

Kama Deva, god of love, tips his arrows with the flowers of the *Mangifera indica*, *Michelia champaca*, *Mesua ferrea*, *Pandanus odoratissimus*, and *Pavonia odorata*.

The *Egle marmelos* leaf represents Brahma, Siva, and Vishnu. The *Euphorbia ligularia* is sacred to Manesha, the snake goddess, and is worshipped by an Assam tribe.

The Cow.—Hindus regard the cow as sacred. Every morning the Hindu wife or maid-servant spreads the floor with cow-dung mixed with water, partly as a religious duty, partly for cleanliness. She sprinkles the urine of the cow over her head, and sprinkles it about the house in purification, when anything has occurred to make it, in their religion, unclean. Every morning, on rising from bed, every Hindu is enjoined to cast a glance on the objects mentioned in the following slokam:—A kapalam (brindled) cow, a mirror, the sun, a rich man, a king, a priest, a giver of rice (in charity), and a chaste woman. It is not, however, the cow's face, but its tail, on which they cast their look. Protecting the cow is meritorious. When a Hindu is dying, his relations give a cow to a Brahman, and repeat the gift on the 11th day after the demise. When a Brahman is married,

the father of the bride always gives a cow, Surabhi, to his son-in-law, along with other presents. Every Friday the Hindu wife washes her cow. She smears its face with turmeric, and ornaments the animal's forehead with a round mark from the red powder prepared from lime and turmeric. Some Hindus call the cow Kama-dub, or Kama-dhenu, the servant of Indra; other Hindus believe that the cow is Lakshmi, the goddess of prosperity, whom they thus propitiate by their worship. Those who do not possess a cow will buy some grass and give it to that of their neighbour. Amongst the five deadly sins is that of killing a cow; the other four are killing a Brahman, a pregnant woman, a child, and killing one's mother.

The Bull is not revered equal to the cow, but it is the vahan or vehicle of Siva. In all saiva temples may be seen the image of this animal, called Nandi, made of black stone, kneeling before the lingam and yoni, the symbols of Siva and Parvati. In pictures, Siva is invariably represented riding on his vahan or vehicle, a bull. A bull, both in the saiva and vaishnava temples, carries the kettledrums which are sounded for worship three times daily. When a cow or bull falls sick, Hindus will vow that if the animal recover, it shall be left in the temple; and every Friday the Brahmans employed in the services of the temple, when they lave Siva's symbol and the Nandi with milk, in the ceremony called Palu Abhishekam, the devoted bullocks are likewise thus washed.

Daily Life of the Hindus.—Having briefly sketched some of the various rites now forming the religion called in Europe Hindu, and the differences in the forms of idol-worshipping which are to be found, it may be interesting to conduct one of this faith from the cradle to the grave.

Childhood and Adolescence.—The ceremonials observed on the birth of children, at the commencement of their education, on investiture with the sacred thread, communication of a gayatri or initiatory sentence, in their marriage ceremonies, and those adhered to on the occurrence of a death in a family, have now a general resemblance among, or are more or less imitated by, all castes, classes, and ranks. On the birth of a Brahman child, the ceremony called Putrotsavam is performed, and on this occasion the father presents sugar and sugar-candy to relatives and friends. On the 11th day the mother is anointed with the oil of the oriental sesamum. On the same day (11th) the Punyahavachanam, or the purification rite for the mother and house, is performed. It is then that the child receives its name—that of some one of its grand or great-grand parents—by the father writing it three times with a golden ring, in unhusked rice, spread on a plate. This naming is called Namakaranam, and is followed by the guests bestowing blessings on the young one, as they scatter rice, coloured with turmeric, over it and the mother, who are seated in the midst of the assembly. The father then distributes money to the poor, and entertains relatives and friends. On this night, for the first time, the child is put into the cradle by the female guests, some of whom sing religious songs, while others rock the little one, and at the close the assembly are dismissed, after being presented with betel-nut, plantains, and boiled pigeon-pea (*Cajanus indicus*). The birth of a girl is less a source of rejoicing, because of that part of the Hindu creed which

lays down that parents and other ancestors attain Swarga-locum or Indra's heaven through a son's efforts. Each new moon, as also on the occurrence of an eclipse, either of the sun or moon, also at the summer and winter solstices, their Utrayanam and Datchanayanam, every caste Hindu, whether Brahman, Kshatriya, Vaisya, or Sudra, offers the Tharpanam, or water sacrifice, in the names of his deceased father, grandfathers, great-grandfathers, and their wives, consisting of seeds of the oriental sesamum mixed with the water. It is as a means of continuing this ceremony that Hindus long to have a son born to them, as in their creed-books it is taught that the manes of ancestors are gratified by the Tharpanam. At five months of age, the Choulam ceremony occurs, and the lobes of the ears are pierced with a small, thin gold ring. When six months old, Anaprasanam, or giving the child rice for the first time, is a social and sacred rite, at which, as also at the Choulam, relatives and friends are entertained. On the first occurrence of the birthday, the child is anointed and decorated with jewels, relatives and friends are entertained; and in the evening the child is carried to a temple, and presented to the deity of their sect. As the second anniversary draws near, or about that time, the boy's head is shaved on a propitious day, which affords another opportunity for feasting friends.

Boyhood.—When five years old, the father ascertains an auspicious day, and entrusts his son to a teacher. The instructor engraves the alphabet with an iron style, sometimes set in silver or gold, on a leaf of the palmyra tree, which is then coloured with turmeric. The leaf is placed on unhusked rice spread over the floor, and the teacher, whatever the sect or caste of the pupil be, invokes the god Vigneswara to smooth the difficulties in the way of the child's studies. Then, holding the boy's forefinger, he thrice traces with it the forms of the vowels in the rice, teaching the boy their sounds. The pedagogue is presented with a new cloth and some money, and dismissed, after which relatives and friends are entertained. On the seventh or ninth year, the Upanayanam is performed, on which occasion the family priest—Upadhyaya, SANSK., Upa-dhialu, TEL.—causes the boy to offer a burnt-offering, Homan, to the entire pantheon of gods, by pouring ghi (clarified butter) over the fire. He then invests the youth with the zandiyam, the zonar or sacred cord, letting it fall from over the left shoulder to the right side. He subsequently teaches the gayatri to the boy, if he be of the Brahmanical order, as also the morning, noontide, and evening prayers, the due attention to which is considered sufficient to remove all sins committed during the day and night. The gayatri or gayatri mantram of the Brahmanical or priestly order is never pronounced aloud, and it is exceedingly rare that any Brahman can be induced to divulge it. Its literal translation is: 'O'm! earth, air, heaven, O'm! Let us meditate on the supreme splendour of the divine sun; may he illuminate our minds.' It is considered the most sacred text of the Vedas; and the common belief in and reverence for it is the bond of union amongst the entire Brahmanical order. With this ceremony the boy is considered to be born again, and he is of the Punar Janma, or twice born. This is the spiritual birth of the Hindu, or his regeneration, for until this time the uninitiated youth,

though of the Brahmanical class, so far as his right to perform religious ceremonies is concerned, is only regarded in the light of a Sudra. If the Vaishnava youth, who has now been initiated into the mysteries of the Brahmanical order, be set apart for the sacerdotal office of the priesthood, he is further marked, by being branded on the muscular part of both arms with the sanku or chank, and the chakram or disc of Vishnu. This is called the Chakrankitam. From this time he is ranked as a Brahmachari, or of the order of bachelors, for he has now entered on his religious life,—the whole of the days of a spiritual Brahman being apportioned into four religious stages, viz. that of the Brahmacharyam, or bachelorhood; Grahastashramam, or the married state; Vanaprastam, the living in solitude with his family; and Sanyasam, or the abandonment of all worldly matters. A bachelor's dress differs from that of a married man, in so far as he does not wear the dhoti, but only a wrapper round the lower part of the body; he is prohibited from eating betel, and continence is enjoined. Among other Hindu castes, the Brahmachari ceremony is performed at any time prior to the celebration of marriage, but their gayatri is from the Puranas, not the Vedas.

Marriage.—There is no time fixed for the marriage of sons. It is performed at any time from infancy, as the parents may please. But amongst the priestly and mercantile orders, the Brahmans and Vaisya, as also among the goldsmiths, girls must be married before they attain puberty. The Brahmans believe that they would be as if guilty of murder if they allowed a girl to grow up before being married. This is founded on correct physiological knowledge. And in Southern India, they, as also the goldsmith tribe or race or caste, regard such a possible occurrence with so great horror, that they say it would be incumbent on them if it happened, but which is invariably guarded against, for all the family to drown themselves. Children have no voice in the matter of their marriage. When parents are desirous of having their sons married, they institute inquiries amongst their relatives or friends not of their own gotram or tribe. They visit the girl's parents in a propitious hour, and request their daughter in marriage for their son. The parents of the girl make inquiries as to the character of the boy, and if satisfied, they promise their daughter for him. It is not customary for a girl's parents to go seeking for a husband for their daughter. When so far arranged, if the girl's parents be poor, they may perhaps stipulate that jewels and money shall be presented to their daughter at the marriage time. But this practice, which is a remnant of the ancient custom of purchasing a wife, is gradually dying out with all but the humbler people. Now-a-days, a rich Hindu would disdain to receive money from the parents of their son-in-law for giving their daughter to him, and many tribes—for India contains the descendants of numerous distinct races—repel with disdain any insinuation of their readiness to sell their daughters. Indeed, sons-in-law do now occasionally receive some dowry of money or property with their brides. In a recent instance, so much as five lakhs of rupees (£50,000) are said to have been given to a son-in-law who had already four wives. But the former practice of disposal of their female children is clearly marked in their marriage law, in which a girl, who quits her father's

house for her husband in another family, ceases to be an heir of her own parents, though she acquires rights in the property of her new home.

Marriage Ceremonies.—When all the preliminary arrangements are settled, a day is fixed for the performance of the marriage; preparations are made by the father of the girl, who invites relatives and friends to be present on the occasion, the invitations being usually communicated verbally, but sometimes by letter. On the day preceding that of the marriage, by the Snat'haka Varattam, the youth is relieved of his bachelorhood, the ceremony on this occasion consisting in the homa or fire-sacrifice, and giving of charity. On the marriage eve, the bridegroom, accompanied by his parents, relatives, and friends, goes in procession to the bride's house, and presents her with a new cloth of some value, with any jewels that may have been before agreed on; betel-nut is handed to the guests, and friends and relations are entertained. The poor Brahmans, too, are remembered on the occasion, the money-gifts to whom are called Datchana. The wedding-day at length arrives, but with emotions very different from those of the principal actors in ancient Hindu times, for now-a-days both bride and bridegroom are usually quite infants,—and if not both, the bride with most tribes certainly is so. Tribes of Sudras, however, and a fair, intellectual literary race called Kait or Kayasth, who claim their origin from a deified mortal called Chatr-goputr, also many of the Pariah tribes, allow their girls to grow up and remain in their father's house, without any feeling of shame being associated with the practice. And the Vedas teach us that in their times virtuous maidens remained unmarried in their father's house long after they had grown up. On the wedding-day, the bride and bridegroom are anointed with oil (the Abhiangana-snanam), are dressed in their best, and decorated with jewels. The father of the bride has erected a temporary canopy in the court of his house, beneath which she is seated beside her groom, and the family priest commences the ceremony by causing them to make a burnt-offering, by the homa sacrifice of pouring ghi into the fire, whilst the priest utters a mantra. At the same instant, by the Navagraha Aratanam and Asht'ha dik palaka Aratanam, a series of incantations, they bring Indra, Varuna, Agni, Yama, etc., from Swarga-locum and locate them in any casual article, in some part of the house.

When seated, the girl is formally given to the husband (Kania-danam, literally spinster-giving); a priest blesses some water in a small vessel, and the father of the girl, taking this and his daughter's right hand, places them together in the bridegroom's right hand, saying, 'I do this, that my father, grandfathers, and great-grandfathers may attain Swarga' (heaven). The bridegroom then rising, and standing before the bride, amidst the deafening din of tomtoms, ties round her neck the mangala sutram, a thread coloured with turmeric, to which a golden jewel called Bottu or Tala is attached. Sandal-wood paste, perfume, and flowers are presented to the guests, betel-nut is offered to all relatives and friends, and money-presents are made. The married couple receive Asir-vadam (benedictions and congratulations) from the assembly, and as they prostrate themselves at their parents' feet their parents bless them. The prostrations are

also occasionally made at the feet of other near relatives, who likewise bestow a blessing. Amongst the Brahmans, the ceremonials of the marriage are continued for five successive days, and for three days, or one day, or seven days, with other castes. On the fifth or last day, the gods who were brought from Swarga into the bride's home, and have been daily worshipped there, are released. Four earthenware pots, placed beneath the pandal or canopy, are filled with rice highly coloured with turmeric, and a Brahman sitting near, by motions from his hands, affects to feed the located gods (Navediam), and then to release them. This is the Naka balli, or offering of victims, to the gods of Swarga-locum. And now the parents of the newly-married couple, as also relatives and friends, interchange presents, and make gifts to the young people. In the evening of that day the bridegroom takes his wife home. This is done in a procession, in which parents and relations join, and is treated as a religious ceremony, called Grahapravesam, or house-entering, immediately after which the bride and bridegroom are seated in the middle of the floor, the father of the girl presents them with new clothes, and the relations and friends are feasted. After remaining three days in her husband's home, the girl-wife is taken back to the house of her parents, with whom she lives, making only occasional visits to her husband's residence, until puberty. On this event her father sends word to her husband, who presents gifts to the bearer of the happy tidings, fixes on an auspicious day to bring his wife home, and intimates the date to his father-in-law. The latter prepares a cot or bed, candlestick, cooking utensils, chairs, boxes, and other household fittings, also buys new clothes for his daughter, whom they convey to her husband's house for good, and an entertainment is given to all relatives and friends. Her parents remain in the house with their daughter and son-in-law for two or three days, and before taking leave of them they give them some advice for their guidance.

Married Life.—From this time the young wife lives with her husband, in subservience to her mother-in-law or sister-in-law, whichever be the head woman in her new home. As a young thing she cannot have much to say; but her little ways and tiny talk are at an end, and it is even, on many occasions, considered highly indecorous for her to speak at all. She cannot speak to her husband in the presence of his father or mother or other people, and partly from shamedness, partly from fear of them, her husband rarely speaks to his wife in their presence. This intense reserve goes off greatly as they grow older; but in no instance, perhaps, does the Hindu wife ever attain to the same freedom of speech with her husband as marks the intercourse with the young wife in a Mahomedan family, where they are sometimes married equally young, and where their innocent prattle is the very life of the household. At home, however long she be a wife, a Hindu woman never eats till her husband finishes his meal; she rises and stands in a respectful attitude if her husband or his parents or brothers enter the house, and at all times addresses them in a low tone of voice, and speaks slowly. And so long as the husband's mother or his sister is the head of the house, the husband communicates his wishes as to what he wants his wife to do, not to her

directly, but through his mother or sister. Abroad from home, the Hindu husbands and wives may at all times be seen walking along the roads, but the wife never presumes to walk at the side of her partner. She is always a pace or so behind, and a little at the side. If they be out on matters of business, the wife continues, all along the road, to prompt her husband as to what he is to say or do, but the instant that the place of business is reached, she falls off to a distance, and never presumes to take any part in the discussion. In a poor family, the wife, as in all countries, has to perform the entire domestic duties of the household, but with richer people who keep servants the wife's labours are restricted to superintendence, attention to her children, sewing, and other female occupations. They are in this social respect much in the position that Europe was a few hundred years ago; but there is this difference, that scarcely a Hindu wife is able to read or write, or even permitted to learn. Since the middle of the 19th century, in the presidency towns, a few female schools have been established by the better-educated Hindus, who are desirous that the next generation shall receive educated partners in their homes. But in all India, out of a population of nearly 200,000,000 of Hindus, there are not, perhaps, in 1883, 3000 girls of the higher Hindu castes under tuition. The younger men are averse to the continuance of the intense restraint hitherto imposed on their homes, and are breaking through it, but these are almost solitary exceptions to the vast mass. Brahman girls are forbidden to be educated at all; and those who urge education on them are opposed by the women themselves, who will exclaim, 'What! would you make us as dancing-girls!' the educational efforts having only hitherto been directed to such unfortunate sisters, from the fear—and it is shared with many men of the Hindus and Mahomedans—that education may tempt, by giving facilities, to vice. In this they evidence a great ignorance of human nature, a more enlarged knowledge of which would convince them that only the training of the moral faculties can uproot vice, which, where the evil desire prevails, no restrictions can restrain. The utmost that a Brahman woman learns, are the songs and hymns sung by women in their own houses during marriages and other festivals. The Hindu wife—bred from her childhood in the strictest seclusion, consigned at an early age to the care of a husband of whom she can have previously known little or nothing, and who is often as dependent upon others as herself—leads a life of mysterious quietude, varied only by the rites of religion and the ordinary events of the family. Of the world around her she knows nothing. All her thoughts and feelings, joys and sorrows, desires and affections, are imprisoned within the little circle of her own household. Her mental faculties are either altogether undeveloped, or wasted upon toys, ornaments, idle tales, family gossip, or similar frivolities. Her moral powers, too, are overlaid by superstition and prejudice. Yet these ladies are the mothers of the rising generation, who are acquiring the language and the literature of Europe, and fondly imagining that its members are as capable of exercising the rights of self-government and self-control as those, who have sprung from the free and independent women of the western world, whose mothers in the warlike

ages took part in the counsels of their nations, and accompanied their warriors to the field. Hindu wives are only allowed to speak to their nearest relations, fathers, brothers, etc., and are never trusted from home alone. Married women, when at the daily bath, smear their bodies with turmeric, and place on their foreheads the round mark with the red colouring matter from the turmeric? and, like many other orientals, paint their eyelashes with lamp-black. Married women also wear a bodice. Though their religious books (Shastras) permit the Hindu widow to re-marry, custom, which is more rigorous, forbids it; and once widows, except with a few tribes,—the Jat, the Gujar, and others,—they ever after remain single. See Marriage Customs.

Death and Future State.—When a Hindu dies there are the inevitable tokens of grief amongst relatives; but women evince their emotion with great demonstrations and noise, proclaiming aloud the good qualities of the deceased, as they beat their breasts and mouths. The death-wail is heard far distant, and once heard is never forgotten. 'Naked he came, and naked has gone; this dwelling-place belongs neither to you nor to me.' Relatives and friends, on learning the melancholy tidings, go to the house of mourning to condole with the bereaved family, and the women join in the death-wail, which rises loud above all the other sounds of the busy world around. As death is drawing near, however, the attendants, after purifying the house with cow-dung, perform the Jiva Praias-chittam, by laving the dying man's body with water, placing in his mouth or causing him to drink a little milk, buttermilk, honey, treacle, and plantains (pauchakavia), and then releasing a cow. Such an ordeal few men in weak health could withstand, and it may not be doubted that it is never performed without hastening the fatal event, for the attendants force the five things into the dying man's mouth. After demise the corpse is washed and dressed. The family priest pronounces certain mantra of purification over it, for every household has its own Brahman teacher. It is borne on a bier to the burning ground by four men, and followed by relatives and friends, both men and women. A large heap of firewood and dried cow-dung cakes has been already gathered together there, which are stacked up over the remains, and the son sets the pile on fire. It is their belief that as death parts the soul from the body, the god of justice, Yama, sends two angels with an invisible form to receive into it the fitting spirit, and convey it to Yama-locum, his hall of justice, to be tried there, and awarded its sentence of future punishment or reward. The secretary, Chatr-gopūtr, records the decree, and the disembodied spirit takes up its abode in Swarga, or in Narika, or revisits earth to be re-born, and afforded another opportunity of gaining release from mortality. The day following the demise and incineration, they revisit the spot. They pour milk or water, or milk and water, over the ashes, and make an offering of rice to the Preta, the departed soul. On the second, third, or fifth day, the son selects any small black stone, or three black stones, which he places against a pipal tree, *Ficus religiosa*, on the bank of a pond or tank. This represents the deceased, or rather his Preta is supposed to be located in the stone, and where three stones are used, those also of his grandfather or great-grand-

father; and each day, for ten days, the son offers to the stone or stones a water-sacrifice to quench the thirst of the departed. He also cooks rice there, and offers it to a crow, to satisfy the hunger of the deceased; he continues this every morning till the tenth day, because it is the Hindu belief that the soul of the departed hovers about the house for ten or twelve days, and then takes up that future habitation which, according to their view of the transmigration of souls, may be its lot. On the tenth day the stone is thrown into the water. The object of all this is their belief that the shade of the departed is occupying five separate beings and places,—one descends upon his son, a second rests on the place of incremation, a third in the house he has left, a fourth in the stones that are raised to represent him, and the fifth in the crow to which the food is thrown. And if the crow refuse the food, the beholders deem it an augury of the ill life of the departed, or that some object of his life remained incomplete.

Widowed State.—If the deceased was a married man, the mangala sutram, or sacred thread, which was tied round the neck of his bride on the wedding day, is now broken by other widows of the family. She ceases to wear a bodice or jewels, or flowers in her hair. She discontinues the use of turmeric when at the bath; the red mark is no longer placed on her forehead, and in many cases the long black tresses are removed, for some classes of Brahman women have their head shaved. From this time their lives are one continued scene of misery. Restricted to the meanest of the household avocations, they are treated by their nearest relatives with contumely and neglect. Their very loneliness and bereavement, instead of being occasion for sympathy and endearment, only calls forth harsh, often brutal, treatment. Their very condition is a term of abuse; and, denied it on earth, many a Hindu widow seeks peace in the grave, for there the wicked cease from troubling, and there the weary be at rest.

After-Death Ceremonies.—On the 11th day, among Brahmans, the son of the deceased selects two or three relatives, or several Brahmans, to be in the place, or representatives, of his parent. They are anointed with the oil of the oriental sesamum. The son presents them with flowers, the sandal perfume, and new cloths, and then entertains them. Until they finish their meal, no member of the household is allowed to partake of food. So soon as they rise, however, a morsel of rice is thrown to the crows, and the representatives of the deceased are dismissed with betel-nut, new cloths, and presents of money, according to the son's means. All other relatives present are then entertained. For one year from this time this becomes a monthly ceremonial on the day of the deceased's demise. On the first anniversary of the deceased person's samvatsarikam, a Hindu, however poor, must, with much display, perform the ceremonies which are then required. This necessity is a great tax to all of them; but where several deaths have occurred in a family, it is a ruinous burden, for the rules of their faith compel their performance, and if a person have not money of his own with which to perform this, he must beg for it or borrow it for the purpose. The religious importance to the deceased of the performance of this anniversary rite is considered very great, and it is this which occasions the great

desire to have a son. If the family be what in law is called a united Hindu family, the ceremonial is conducted by the eldest son, but where they have separated, each son must perform it separately. For those who have no sons, the widow can perform it, and the widower husband can do the same for his wife. On the future anniversaries the sradha only is performed.

Burial and Burning.—Before the body is taken to be burnt, it is anointed with ghi, or clarified butter. Arrived at the side of the water, the nearest relation sets fire to the pile, which is soon in a blaze. It takes three cwt. of wood to consume the body of an adult. At the present day, the general practice of the Vaishnava Hindus is to burn their dead, but they also launch the bodies into the stream of the Ganges, or expose them on the open plains. After the incremation, using a branch of sami, and another of palasa (*Butea frondosa*), instead of tongs, the son or nearest relative first draws out from the ashes the bones of the head, and afterwards the other bones successively, sprinkles them with perfumed liquids and with clarified butter (ghi) made of cow's milk, and puts them into a casket made of the leaves of the palasa (*Butea frondosa*). This he places in a new earthen vessel, covers it with a lid, and ties it up with a thread. Selecting some clear spot where encroachments of the river are not to be apprehended, he digs a very deep hole, and at the bottom spreads the cusa grass (*poa*), and over the grass a piece of yellow cloth. He places thereon the earthen vessel containing the bones of the deceased, covers it with a lump of mud, moss, and thorns, and plants a tree in the excavation, or raises a mound of masonry. Subsequently, the son or nearest relative repairs to the cemetery, carrying eight vessels filled with various flowers, roots, and similar things; he walks round the enclosure containing the funeral pile, with his right hand towards it, successively depositing at its four gates or entrances, beginning at the north gate, two vessels containing eight different things, with this prayer: 'May the adorable and eternal gods, who are present in the cemetery, accept from us this eight-fold imperishable oblation. May they convey the deceased to pleasing and eternal abodes, and grant to us life, health, and perfect ease. This eight-fold oblation is offered to Siva and other deities; salutation to them.'

In the south of India, the ascetic followers of both Siva and Vishnu bury their dead; so do the Vaishnava, Vairagi, and Sanyasi in the north of India, and the Saiva Jogi. The class of Hindu weavers called Yogi have adopted a similar practice, as also have all the castes in Southern India who wear the lingam. All infants and unmarried persons are interred, as also all the artisan tribes. At the Sanyasi devotee's interment no wailings or expressions of grief are allowed. The corpse, seated in a litter, is borne to the grave, preceded by musicians, and attended by persons who cast rose-coloured powder into the air, or demonstrate in other modes their joy. It is placed in the earth in a sitting posture, instead of being consumed on the pile. A small platform raised over the spot, and exhibiting the sculptured feet of the deceased, commemorates his sanctity.

Ceremonials of Worship.—A Brahman who attends to his religious duties, bathes before sunrise in cold water, and offers a water sacrifice

or libation from his hand. He prays in this wise :

'He who meditates on Pundri kachā (he with the lotus eye), though a very great sinner, will be forgiven.

'If he sprinkle over his head water which is pure and holy, he will be purified and strengthened.

'All sins committed during the night, by word, deed, mind, mouth, hands, feet, belly, organs, or in anger, will be forgiven by Suriḍ jotiṣhi' (the light of the sun).

The next part of the ritual is the ceremony called *Arg'ham*, which is performed to free the sun from the *Rakshasa*, who is striving to hinder its appearance. This consists in offering, four times, a water sacrifice or libation, by taking water in the hands and pouring it on the ground, as he four times pronounces the Vedic *Gaitri*, viz. 'O'm! Bhūrbhuvā sūvāhā, O'm! Tāsa vi'hru varēnyām, B'hargo devāsyā dhīmahi dhiyo yonah pračo dayath.'—'O'm! earth, air, heaven, O'm! Let us meditate on the supreme splendour of the divine sun. May he illuminate our minds.' After this he prays, at length or briefly at will, in the form of a commenting or expounding of the above *Gaitra*.

He then prostrates himself (to *Vasu deva* or to *Krishna*, or to *Vishnu* if a *Vaishnava*) to *Sarvantarīni*, a god who pervades all creatures, and prays him to bless all the Brahmins and cows within the four seas, mentioning his own name, his *got'hram* or tribe *rishis*. At the close he offers to *Narayana* his deeds by body, mouth, heart, and senses.

At noon, prayers are repeated, and he prays to *Suria* (the sun).

In the evening, prayers recur, and he implores *Varuna* (the god of the sky and regent of the west) in sacred words.

Hindu Society.—Hindus are classed as *Vaidikam* and *Laokalam* or *Lao-kikam*, clergy and laity. It is a common notion that the Brahmins of India are the priests of the Hindus, but this is not correct. Though of the priestly or sacred order, the vast bulk of this class are employed in lay pursuits, as soldiers, merchants, lawyers, clerks, perhaps in every avocation of daily life except such as involve manual labour, though they are even agriculturists in Northern India and Orissa. Various sects of Hindus have priests of the *Sudra* caste, and many aboriginal races employ members of their particular tribe or race. Speaking in a general way, it may be stated that where the people of India are followers of the *Puranas* and *Vedas*, their priests are invariably Brahmins; but the extensive *Lingait* sect, and the *Jain*, and all the sects or tribes who worship the village deities, or adhere to spirit or devil worship, select priests from their own classes. Also the *Kansallar*, or artificer tribes of *Sudras*, all of whom wear the sacred cord, select an ascetic member of their own caste as their priest, and have also family priests from their own circle. Indeed, they claim for themselves a superiority to the entire Brahmanical order, asserting their origin to be older; and no one of the *Kansallar* would accept of water from a Brahmin. But, in the usual discrepant character of the Hindu people, although the *Kansallar* claim that their caste possess this superiority, and though they possess the Brahmanical *Vedas*, yet their manner

of conversing and dressing, and their women's clothes and ornaments, resemble those of non-Brahmanical castes. In paying respect to Brahmins, they say and use the *Dandam*, and not, as from an inferior to a superior, the *Namaskaram*, as one Brahmin will to another. Amongst the *Saiva* sect, who have Brahmin priests, the guru is styled *Sankarachari*, and is invariably a *Sanyasi* or ascetic. He resides in a *matham* or monastery along with other Brahmins, to whom he imparts religious instruction or preaches. He is greatly revered by his disciples, who regard him as almost equal to a god. The monastery is supported by the disciples' gifts. The members of these monasteries are charitable to all the poor, and erect temples out of surplus receipts. But the head of the establishment, the *Mat'hadi-padi*, when he travels to superintend his followers, does so with vast pomp and display, in a litter of a peculiar form, often richly ornamented, and accompanied by a great concourse of people, with elephants, horses, and conveyances for his property. Like all *Sanyasi* and Brahmins engaged in religious duties, the members of the *matham* bathe thrice daily. Twice daily the chief worships the *Sahigrāma*, a fossil ammonite from the *Gogra* or *Gandak*, or a gold, silver, or copper idol of *Krishna* or of *Siva*. After washing the idol with water, he decorates it with the sectarian mark, and worships it with offerings of flowers and *tulsi* leaves; he sips a little of the water used in the worship, and the rest is carefully preserved in a silver cup along with *tulsi* leaves, and dropped from a small spoon, '*Voodharni*,' into the hands of disciples, who esteem the gift as cleansing from all sin. The head monk only eats once a-day, and before taking his meal he invariably presents it to the deity. Disciples, when they approach the head monk, prostrate themselves before him. Their mode of caring for the idol is in all its forms identical with that of caring for a living human being,—bathing and anointing it, offering it food, offering it praise and reverence in song, in dancing, and in prayer, and periodical, in some cases daily, and seasonal airings and processions. In exploring the great theatre in *Ephesus*, Mr. Wood discovered an inscription containing information as to the endowments and worship of the temple of *Diana*, and laying down the route by which, on the birthday of the goddess, her silver shrines and other treasures were to be carried in procession from the temple to the great theatre through one city gate, and back to the temple through another city gate, which was called the *Magesian*. And this is a perfect representation of the customs of the Hindus of the present day, and precisely as noticed in *Isaiah* xlv. 7: 'They bear him upon the shoulder; they carry him, and set him in his place.'

Position and Religion of Hindu Women.—A great defect in their social system seems to be the unequal conditions of the sexes. In European households there is almost as little real mixing of different grades of society, as occurs amongst the different castes of India. But among the Hindus, although their creed permits the women to attain heaven on their demise, so long as they are here on earth, whatever secret influence a wife may have, it is not shown to the community. Speculative as are the entire Brahmanical populations, and to a large extent also all the races called Hindus,

many of them diving into the mysteries of their theology, except a Vedantist occasionally make a remark to the women of his household as to the inutility of worshipping their ordinary images, the Hindu wife has little or no instruction in religion, and takes no part in all that array of ceremonial which occupies so much of the daily time of a Hindu, particularly if religious. The Hindu prays morning, noon, and night a somewhat long prayer. The wife's prayer, if she pray at all, is very short, a Saiva woman merely mentioning the name of her deity in the three words—'O'm! nama Saiva!'—'Hail! name of Siva!' Amongst the Smart'ha Brahmins and Mad'hava sect of Vaishnavas, each household keeps a tulsi plant in the middle of its little parterre or courtyard. A small pedestal is erected, in the hollowed centre of which the plant is placed. Daily the women of the house resort to it, circle, 'pradachanam,' and prostrate themselves six times before it, pour water over, and then, standing before it, pray to Lakshmi. A similar worship to the pipal tree, with a sculptured cobra at its foot, is offered both by men and women to whom offspring have not been given. This pipal tree is always on the bank of a tank, in which the devotees bathe, dressed in a silk garment used only when performing sacred rites. Places where cobra snakes have formed colonies are largely resorted to by women longing for children, and they make to the cobras offerings of sugar and milk, for the cobra is deemed an *ayabog* Δεμον, guarding the symbol of the reproductive organ. The prayer of the Brahmin of every caste and sect includes the Gaitri invocation to the sun.

Legal Rights of Husband and Wife.—A girl is accounted by law marriageable at the age of eight. Girls are, however, given in marriage at the age of two and upwards, till they attain their maturity. A Brahmin girl attaining maturity without having contracted marriage, forfeits her caste. The girl, when married, remains with her own family until she reach maturity, when her husband can claim her and remove her to his house. The right of choosing a husband for the girl rests first with her father. Should he have demised, it devolves in succession upon her paternal grandfather, brother, paternal uncle, male paternal cousins, and lastly upon her mother. If these relatives should have neglected the duty of choosing a husband for the girl up to three years after she may have attained the age of eight, she is at liberty to choose for herself. The lads of the three superior classes, namely, the Brahmin or the sacerdotal order, the Kshatriya or the military tribe, and the Vaisya or the mercantile body, may not contract marriage until they have completed the stage of studentship (Menu, iii. 4), the opening of which period is marked by performance of the Upanayanam, or investiture with the sacred thread, and the close by a ceremony termed *Sana-vasthana*. For the Sudras or the servile class, who have no stage of studentship, there is no limitation as to the time for marriage. There are eight recognised kinds of marriage, viz. *Brahma*, *Daiva*, *Arsha*, and *Prajapatya*, which are appropriate for Brahmins, and are based upon disinterested motives; the *Gandharva* and *Kakasha*, which are appropriate for Kshatriyas, and are founded, the former on reciprocal desire, and the latter on conquest; the *Asura*, which is practised by Vaisya and Sudras, wherein the consent of

the party giving away the girl is obtained by a pecuniary consideration; and the *Paishacha*, where the marriage may have been effected through fraud or force practised upon the girl, and which is reprobated for all classes. Though each class has its characteristic description of marriage, there is nothing to bind them to the rites appropriate to them. A Brahmin, for example, may contract an *Asura* marriage, and a *Sudra* a *Brahma* one. The *Brahma* and *Asura* are the most usual forms of marriage. The former is an approved one, and the latter, as a sordid proceeding, is discouraged (i. 42, 43; Macnaughten junr. i. 60). The binding circumstances essential to the completion of a marriage are gift and acceptance of the girl, and the ceremony termed *Saptapathi*, or the seven steps. This is performed by the bridegroom placing the bride's foot successively on seven lines drawn on rice in a platter. From this observance has followed the practice of any two persons pledging mutual friendship by taking seven steps together, so that the term *Saptapathinam* has come to be synonymous with friendship. The ceremonial in question accomplishes the marriage. The other ceremonies observed, including sacrifice by fire (*homam*), are of minor significance. The tying the tali or nuptial token by the bridegroom round the neck of the bride, is a practice sanctioned by usage, but not prescribed in the *Shastras*. The above matrimonial contract in itself fixes the condition of the parties as married, irrespective of the consummation of the marriage, when the girl, on reaching maturity, is taken home by the husband. It brings the girl, should her husband die, to the state of widowhood, with its attendant consequence, and gives her right of inheritance in her husband's family. When either party incurs forfeiture of caste, intercourse between them ceases; and should the loss of caste be on the side of the woman, and she be sonless, she is accounted as dead, and funeral rites are performed for her (*Smruti chandrika*, on text of *Vasista* and *Yajna vultia*). If she have a son, he is bound to maintain her; and in this way, under such circumstances, her existence is recognised notwithstanding her loss of caste. Infidelity in the female, save in certain of the lowest classes, occasions forfeiture of caste, and puts an end to the marriage (*Smruti chandrika*). The husband, however, is not entitled to damages from the adulterer,—the Hindu law not providing for discretionary damages upon any account. Impotence in the man, and confirmed barrenness in the woman, as also loathsome or incurable disease in either, justify separation (i. 47), but will not sever the marriage.

Akbar, emperor of India, forbade marriages before puberty, and sanctioned the re-marriage of widows. The British Indian Government in 1856 by an Act sanctioned this, but up to this time (1883) very few Aryan Hindus of the higher castes have dared the superstitious dread of the gods, and the anger of their caste-fellows, which hinder this act of justice towards their widows.

Murli; *Basava*.—Many young women all through India are married to their gods, and thenceforward are allowed to associate with the temple attendants or others. Girls of the *Vira-saiva* sect and of some of the aboriginal races are married to a knife or other object, and become common. With some of the Hindu sects a

widower cannot re-marry, but such a bridegroom with his bride are each married to a tree with all the customary ceremonies of a wedding, each clasping their respective trees, and they then live together as husband and wife. The weaver castes near Madras devote their eldest daughter to the gods to serve in the temple; and instances occur of temple girls being educated in Christian mission schools.

Hindu Inheritance.—Adoption is legal with the Hindus, and sons are often adopted. If a son be adopted, he succeeds to his adopted father; he loses all claim on the inheritance of his original father, and is entitled to a sixth of the property of his adoptive one, even if after his adoption sons of the body should be born. In Hindu law there are ten descriptions of sons,—one of them the son of a man's wife by an uncertain father, begotten when he himself has been long absent. When a Hindu dies, the sons may either continue to live together with the property united, or they may divide it according to certain rules. If they remain united, the eldest brother takes possession of the property, and the others live under him as they did under their father. In this case the acquisitions of all the sons (who have not formally withdrawn) go to augment the common stock. If they divide, the eldest takes 1-20th; the youngest, 1-80th; and the intermediate sons, 1-40th. Unmarried sisters live with their brothers.

Sectarian Marks.—Amongst the peculiarities which first attract the eye of a stranger on seeing the Hindu religionists, are the red and white marks on their foreheads. Their prominence is often so glaring as to be unseemly. When the theistical Sikh religionists hastened from the Panjab in 1857 and 1858 to aid in quelling the mutiny and rebellion in India, in their wild enthusiasm they named all the Hindus contemptuously 'Matha Din,' literally, carrying their faiths on their foreheads; and a more expressive term could not perhaps have been coined, for all that ordinary Hindus know of their religion are the differences in these marks, which indicate differences of religious sects, not of castes, and the sectaries have a superstitious regard for such distinctions. It is held necessary, where convenient, or no especial objection or difficulty exists, for these marks to be daily renewed. A Brahman cannot perform any of his daily sacrifices, etc., without the completion or contemplation of this distinction; and it is irreverent in one of an inferior tribe to approach a holy man, or to ask his blessing, or to partake in the benefit of any religious rite, without or in view to this sectarian decoration. The Saiva, worshippers of Siva, called Siva-bakht, and the Vaishnava, otherwise Vishnu-bakht, worshippers of Vishnu, are to be known, the former by the horizontal position of their forehead lines, and the latter by their perpendicularity. One perpendicular mark, centrally between the eyes, is generally referable to one of Vishnu's sectaries; it is not common. Two upright parallel lines, with a black or open circlet between or under them, are the commonest distinction of Vaishnavas, whether seen on pictures of Vishnu himself, or on Rama and Krishna, or others of his avatars. In general, perpendicular lines appertain to Vaishnava sects, and horizontal lines appertain to Saiva sects. The marks on the

forehead are ordinarily called *nāman*; the customary substances used are earths, *tirumannu*, or white ashes from a sacred fire, saffron, sanders wood, sandal-wood, white clay, etc. It is a very ancient mode of distinguishing religious sects, and is alluded to in Ezekiel ix. 4. The Sakta sect, when they avow themselves, mark either with saffron or with turneric and borax. The Saura or Suria are true worshippers of the sun; and some of them adore the dormant and active energies of the planet conjointly. This sect, which is not very numerous, is distinguished by the use of red sanders for the horizontal triple line, as well as for the circlet on their foreheads.

Superstitions.—Hindus believe in omens, good and bad, and look for them as encouragements or warnings on most occasions, such as in journeying from one place to another, or when a marriage is on the tapis. It is considered a favourable omen, if, when proceeding on business, a crow fly from left to right; or the traveller meet two Brahmins, or a married woman, or a Sudra with a stick in his hand, or a jackal be seen. If these good omens occur, they believe that they will certainly succeed in the object of their journey. It is a bad omen to meet a single Brahman, or a widow, or if a crow fly from right to left, or a cat cross their path. On seeing any of these evil omens, almost every Hindu will postpone his journey, however emergent; though in this latter case he may return home for a little and start again. It is a good omen, if, when a marriage is under discussion, the toll of a bell be heard or the neigh of a horse; but a person sneezing or the sudden extinguishing of a light are bad omens.

No Hindu ever takes any important step without first consulting the stars, by referring to a Brahman astrologer or to the astrological almanac. If business will not admit of delay, he will consult the *Sivagyanmut* or *Advices of Siva*, or the *buchans* or sayings of Khona, wife of the great astronomer Varahamira, to ascertain whether the time be auspicious. With many Hindu and aboriginal races, the snake is revered; and if a cobra be killed, they inter it or burn it with all the ceremonies usual for a human being.

When an epidemic disease seems to be approaching a village, the village tutelary divinity is carried in procession to meet the god of the pestilence, and with shouts, execrations, and defiant gestures they deter the advance.

The names, both of men and women, and of their towns, are frequently those of their gods and their avatars, or of their deified heroes,—as Siva, Ananda, Eswara, Gopala, Narayana, Rama, Bhawani, for men; Durga, Kali, Ganga, Lakshmi, Radha, Saraswati, for women; and Bhima, Yudishtra, Draupadi, Kunti, their ancient heroes and heroines.

Charity and Alms.—Almsgiving is expressly enjoined by the Brahmanical religion, as conferring merit and power over the unseen world, not for compassion or brotherly love, or for doing as we would be done by. Hindu charities consist in feeding Brahmins and pilgrims; building choultries, and houses, and temples, and bridges; in planting trees, and groves, and gardens; making roads; in supplying water to travellers; in digging wells or tanks. It is, however, an oriental idiosyncrasy for every man to desire, not to found a family or restore an old

ancestral residence, but rather to leave some residence exclusively commemorative of himself, and to repair nothing which his predecessors have left, lest they should have the credit of it with posterity. If they give alms, it is to persons of their own or of a higher caste. For a Hindu to bestow alms on a Pariah, however urgently in need the latter may be, is almost an unknown act.

Food, and Cooking, and Hospitality.—Like that of the bulk of the human race, the food of the Hindu is obtained almost wholly from the vegetable kingdom. But with the Hindu the adherence to this kind of diet forms part of their religious belief. Unlike the Hebrews (Deut. xiv.; Leviticus xi.) or the Mahomedans, to whom only certain creatures were forbidden, several Brahmanical tribes do not touch animal food at all, and no Hindu of the four great castes can partake of the flesh of the cow, much less avow that he had so done. They also require their food to be prepared by people of their own or a higher caste, or, in their dread of pollution, even by their own hands. With some sects this dread is carried to such an extent, that they do not permit any unconverted eye to see them cooking, and if accidentally overlooked, will bury or give away the materials under preparation, however hungry they be. Many Hindus likewise cook within a sacred circle, and if any lower caste or no-caste person enter it, the cooking is suspended, and the article destroyed. Many Hindus eat their meals dressed in silk clothes used only for sacred rites, and waited on by their wives or female relations, who do not presume to eat until their husbands have finished. They eat off metal dishes, of gold, or silver, or brass; but the ordinary platter is made of leaves of the plantain, banyan, lotus, or palasa, pinned together with grass stalks in the form of a dish. These are sold in every bazar. They are employed to ensure safety from pollution, being thrown away after the meal. The custom mentioned in John ii. 8, of appointing a governor of the feast, is one followed by Hindus at a large feast. There is a continued stream of their hospitality, such as it is, but castes will rarely eat with one another; and at meals each Brahman sits with his own leafy platter apart from his neighbour, to prevent the possibility of even accidental pollution by his own food touching that of another, or *vice versa*. Where such stringency exists as regards people of their own faith, their associating at meals with people of other creeds is of course an impossibility. These remarks apply to the Brahmanical Hindus in general; but the members of many of their reformed sects eat with each other, without regard to former caste distinctions. In like manner, as followers of one faith, all individuals are equally entitled to the *prasadam*, or food which has been previously presented to a deity; and it is probably the distribution of this in all temples, and, for instance, annually at Jaganath, that has given rise to the idea prevalent in Europe, that at this place all castes of Hindus eat together. A Hindu in general eats twice daily, in the forenoon and after sunset; but a Brahman widow eats only once daily, at noon. The food of the Hindus along the seaboard of India is rice,—when they can afford it,—partaken of with vegetable curries or pickles as condiments. In the higher lands of the interior, and in the more northern portions of India, the

pulses and millets, with wheat and maize, are the articles in common use, in the form of cakes. The prior processes which in Europe fall to the miller and the baker, are got through in the Hindu household. The pestle and mortar is with Hindu families a very important domestic implement, and few are without it. The mortar is generally of stone, but often a block of wood, the lower part shaped like an hourglass stand, and in the upper is a conical cavity of the contents of about two gallons. The pestle is of hard wood, about four feet long, and two inches in diameter, with the ends tipped or ferruled with iron, to prevent their splitting or wearing. It is usual for two women, to whose lot beating rice out of the husks and similar domestic operations generally fall, to work together. The pestle is raised perpendicularly by the right hand of one, and as it falls is caught by the right hand of the other, she who raised it quitting it in its fall; when tired with their right hands, they use the left, relieving them. A song is frequently chanted during the work. The stone mill, so often alluded to in the Old and New Testament, consisting of two flat stones worked by one or two women, is in use in every house. The religious restriction to vegetable diet is doubtless of Buddhist origin. Buddhism had the effect of inspiring a great respect for life; and all orthodox Hindus regard the inviolability of animal life as the most sacred of laws. In whatever degree sanguinary rites may be practised by any portion of these people, such are directly opposed not only to the influence and example of almost all the Brahmans, but to the practice of the immense majority of the more cultivated and the higher castes. Myriads of Hindus have lived and died without ever partaking of animal food; and amongst the Jains, every precaution is taken to prevent themselves involuntarily destroying or swallowing even insect life. Their priests never partake of stale food, lest living creatures should have been generated in it, keeping a cloth over their mouths lest an insect unconsciously enter; and they walk with a small soft broom in hand, with which they gently sweep the ground on which they are to tread or sit. With all this, there is occasionally witnessed amongst some one or other of the races following Hinduism an apathy and indifference as to the preservation of the lives of their fellow-creatures which Europeans fail to understand. An instance of this occurred in 1820 at the fair at Hardwar, in which 700 persons are stated to have lost their lives. It was calculated that not less than two millions of people had assembled on the occasion, when, at the opening of the fair, the rush was so great towards the steps of the bathing-place as to cause this melancholy catastrophe. Dreadful as it was, the exertions of the British officers only prevented its being infinitely greater. An eye-witness remarked that the Brahmans looked on not only with apathy, but with joy depicted in their countenances; and women at a short distance were bathing in other parts of the sacred water, with as much indifference as if the utmost serenity prevailed around them. After the fair, the roads for miles round Hardwar were strewed with dead bodies of men, women, horses, camels, and dogs.

Dress and Clothing.—The dress of Hindu men is of white muslin or cotton cloth, and their upper coat is now generally sewed. The under

garment for the lower part of the body, the dawatī or dhoti, is a loose, unsewed wrapper. Women of all classes wear unsewed wrappers of green, red, or yellow coloured cotton, edged with silk or gold embroidery, and a bodice of cotton or silk.

Scalp - lock. — All Hindu men retain only the tuft of hair on the crown of their heads, which is familiar to Europeans from the pictures and descriptions of the Indians of North America as the scalp - tuft, the most glorious trophy, if not the sole reward, of their victor. The Hindu practice of wearing this scalping tuft (Shik'hā, SANSK.; d'Zutu, TEL.; Kudimai, TAM.) was doubtless brought with them from Central High Asia; for, like the Indians of N. America, the Scythians cleaned the scalps they took, and hung them to their horses' bridles. The Decalvare of the ancient Germans was nothing other than the scalping mentioned in the laws of the Visigoths, *capillos et cutem detrahere*. According to the annals of Flude, the Franks still scalped about the year 879, and also the Anglo-Saxons; and head-hunting is only now being suppressed among the Khasya and Garo races of the N.E. frontier, and amongst the Dyaks of Borneo.

Tiles. — One amongst the honorific social distinctions of the Hindus is that of Acharya, a religious teacher, properly a Brahman who instructs religious students of the Vedas, of the Brahman, Kahatriya, and Vaisya castes, but is in use as relating to any religious instructor. In the south of India the term is applied to the head of a religious society, equivalent to the Mahant of Hindustan, and the Panda or head priest of a temple. But it is assumed also by Brahmans engaged in secular pursuits, by carpenters and other artisans, and amongst the Mahrattas by cooks.

Caste. — A great object with Hindus in general is to preserve their social position in caste. The divisions and subdivisions of their different castes are very numerous,—the Sudra are said to have nearly fifty; but with all Hindus purity of caste is held of the highest consequence, and its loss may occur from various causes.

The division into castes or sects of the Aryan races whom we style Hindus, was known to the Greeks, and seems to have been early known to the Arabs. The Grecian authors, on the authority of Megasthenes, divided the tribes into seven, and Ibn Khurdadba (obit A.D. 912), an officer of the khalifa, also arranges them into seven classes, but the occupations differ which these authors attributed to them:—

Greek Authors.		Arab.	
CL.	Strabo.	Diodorus.	Arrian.
1. Philosophers.	Philosophers.	Sophists.	Ibn Khurdadba
2. Husbandmen.	Husbandmen.	Husbandmen.	Sab kufria.
3. Shepherds and Hunters.	Shepherds and Cowherds.	Shepherds and Cowherds.	Brahma. Kataria.
4. Artificers and Merchants.	Artificers.	Artificers, Merchants, and Boatmen.	Sudaria.
5. Warriors.	Warriors.	Warriors.	Baisura.
6. Inspectors.	Inspectors.	Inspectors.	Sandalia.
7. Counsellors & Assessors.	Counsellors & Assessors.	Assessors.	Lahud.

Ibn Khurdadba's first name is unknown. By the others he seems to indicate the Brahman, Kahatriya, Sudra, Vaiya, the Chandala, and jugglers.

Dr. Caldwell tells us that in all ordinary cases where illegitimate children are born, if there

be no great disparity in rank or caste between the parents, the child takes that of the two parents which is the lower. Where considerable disparity exists, and particularly when the woman is of the higher rank,—as, for instance, when a high caste woman, or even a woman belonging to the middling castes, has formed an intimacy with a Pariah man,—the mother either procures abortion or commits suicide. The child never sees the light. Caste has its chief relations with race descent. There are historical instances of sovereigns creating Brahmans in great numbers from amongst other races; the Mahratta Brahmans are said to have been so made from amongst fishermen; and a great body of Rajputs were consecrated of the Kahatriya caste.

To escape possible defilement, the servile races —Pariah, Mhar, Mhang, Chamar—are compelled to dwell outside the village walls, and in the larger towns Christians have their own quarters; and the higher Aryan castes require the predial races not even to approach their dwellings, but to stand at a distance and call aloud what they wish to communicate. A Hindu may lose or be expelled from his caste for many social acts, but no meritorious deed can raise a Hindu from one caste to another, nor does immorality or crime degrade him from his caste. Many castes eat and drink together, but intermarriages of persons of different castes are almost prohibited in the higher castes, and are rare even in the very lowest. It is a hedge over which many persons desire to leap. Chaitanya and other reformers have founded sects which have abandoned caste distinctions; and the lower tribes, as the Chamar or shoemaker, the Dhobi or washerman, have largely joined anti-Brahmanical sects, as the Kabir panthi, Satnani, etc. The aboriginal races, of Turanian descent, as a rule, by origin and nature are averse to caste distinctions and Brahmanism.

Avocations.—The races following Hinduism, and the converts from amongst them to Mahomedanism and the Sikh faith, are, almost exclusively, the owners and tillers of the soil of India; and as agriculturists in Northern India are in village proprietary communities, those of Central India are village proprietors, and those of Western and Southern India are joint holders under Government. The entire banking interests in India, moneyed men and capitalist class, smaller merchants, traders, and carriers, are Hindus; and Hindus are settled for merchandise in Arabia, in Afghanistan, all through Persia and Turkestan; they are in Astracan, in the southern provinces of Russia, even as far as Moscow; also in Further India, throughout Burma, Tenasserim, southwards to Singapore; and, from unknown antiquity, one Hindu tribe of the north-west of the Peninsula have been located on the east coast of Africa, southwards to Mozambique, and have been the willing agents of slave-dealers.

The more famous amongst their writers:—

Agastya.	Bhaakara.
Anandagiri.	Bhatti.
Angirasa.	Bhava Bhuti.
Apastambha.	Brahmagupta.
Arya Bhatta.	Charaka.
Aswalayana.	Charandas.
Atri.	Dandi.
Bharata.	Devi Mahatmaya.
Bharavi.	Dhanwantri.
Bhartrihari.	Dya Dwiveda.

HINDU.

Gopinatha.	Raghu Nandandana Bhattacharya.
Gotama.	Charya.
Gritsamada.	Raja Sekhara.
Halayudha Bhatta.	Ramanand.
Hema Chandra.	Ramanuja.
Jaya Deva.	Sama Raja Dikshita.
Kabir.	Sankaracharya.
Kalhana.	Sayana.
Kalidasa.	Sayani Chandra Sekhara.
Katayayana.	Sivavyakhar.
Kautsa.	Soma Deva Bhatta.
Kavi Karnapura.	Sri-Harsha.
Kavi Raja.	Sri Krishna Tarkalankara.
Krishna Dwaipa Yana.	Sudraka.
Krishna Misra.	Sundaru Misra.
Kulluka Bhatta.	Susruta.
Madhavacharya.	Vachispati Misra.
Magha.	Vaidya Natha Vachispati.
Mallinatha.	Valmiki.
Mamatta Bhatta.	Varaha-Mihira.
Manu.	Vararuchi.
Markandeya.	Vikramaditya.
Mira Bai.	Visakha Datta.
Murari Misra.	Vishnu Sarman.
Nanak.	Visva Mitra.
Panini.	Visvanatha Kavi Raja.
Parasara.	Vopadeva.
Patanjali.	Vrihaspati Misra.
	Yajnavalkya.

A knowledge of reading and writing is very widely diffused, but those who cannot write use trade-marks as their sign-manual, of which the following may be mentioned:—

Mang.	A daffra.
Dher.	A staff.
Carpenter.	Chisel or kakra.
Barber.	Looking-glass.
Shopkeeper or Bakal.	A balance.
Dhangar.	Scissors.
Gardener.	Kurpi.
Banjara.	Spear.
Koli, Ramusi, Bhil.	How and arrow
Attar and Rangrez.	Joli.
Kassar (brazier).	Tulsi.
Kunbi.	A plough.
Goldsmith.	A hammer.
Blacksmith.	Anvil.
Chamar.	Leather knife or rapi.
Tailor.	Yard-measure.
Soldier.	Dagger.
Teli.	Subbal pur.
Byragi.	Forceps.
Maniar.	Churi or bracelets.

Religious Liberty.—From the oldest times, succeeding rulers of Travancore and Cochin, and seemingly those of Gujerat, have ruled their dominions with the most entire religious liberty; and Arab races, Jews, Parsees, Romans, Africans, Egyptians, Portuguese, Dutch, and British have traded and settled there. At Patna, the little Christian church, or Mut'h, as it is inserted in the village dufturs, was endowed its portion of land exactly as any other religious establishment.

In the changes between Buddhism and Hinduism, and with the occasional forcible proselytizing by the Mahomedans to their faith and by the Portuguese at Goa to their views, there has been much cruelty; and, generally speaking, Hindu and Mahomedan sovereigns favoured those of their subjects who were of the rulers' faiths. But, by an Act passed in 1840, a discontinuance was put to all interference on the part of British functionaries in the interior management of native temples; in the customs, habits, and religious proceedings of their priests and attendants; in the arrangement of their ceremonies, rites, and festivals; and generally in the conduct of their interior economy; the tax on pilgrims was abolished;

HINDU.

and in 1841, salutes and the attendance of troops or military bands were forbidden at such festivals.

Hindu Morality.—Major Moor remarks that it is some comparative, though negative, praise to the Hindus, that the emblems under which they everywhere exhibit the elements and operations of nature are not externally indecorous. Unlike the abominable realities of Egypt and Greece, we see the phallic emblem in the Hindu pantheon without offence, and know not, until the information be furnished, that we are contemplating a symbol whose prototype is indelicate. The external decency of the symbols, and the difficulty with which their recondite allusions are discovered, both offer evidence favourable to the moral delicacy of the Hindu character. Temples are nevertheless commonly to be seen, on which are represented, in statues even of life size, figures which only the mind of man in all its corruptness and wickedness could conceive. However recently erected, these are perhaps but remnants of the period succeeding the asceticism and austerities of Buddhism. Books then came to be written about heroes whom they deified, some of whose lives, as painted, are a continuous outrage of decency. But the people generally never followed such licence. To have done so, society must have ended. At the present day, undoubtedly, the morality of the Hindus is far above the stories in their books, the statues on their shrines, or the licence which prevails amongst the few who associate with the Devadassa at their temples; and it is only their patience under such grossness, their not rising in wrath to reform it, their worship of fire and the elements, of the sun and moon, of the lingam and yoni, of the saligrama, the binlang, the tulsi, and the poa; their reverence for, almost worship of, the cow, the kite, and the cobra; their worship of Nandi, of idols with unnatural or hideous forms, of shapeless blocks of wood or stone, in which the educated have no faith, and which are often treated with irreverence by all; their respect for books of the contents of which they are ignorant, and which are not worthy of their present civilisation,—it is their adherence to all these confused amalgamations of the coarse Vedic creed, Scythio worship, fetishism, the austerities and sacredness of life of Buddhism, and the licence of Vishnu as Krishna, which excites the wonder and the contempt of all educated men. And their indifference is the more remarkable, because two thousand years ago they had a religion 'less disgraced by idolatrous worship than most of those which prevailed in early times. They had a copious and cultivated language, and an extensive and diversified literature; they had made great progress in the mathematical sciences, they speculated profoundly in the mysteries of man and nature, and they had acquired remarkable proficiency in many of the ornamental and useful arts of life. In short, whatever defects may be justly attributed to their religion, their government, their laws, their literature, their sciences, their arts, as contrasted with the same proofs of civilisation in modern Europe, the Aryan Hindus were in all these respects quite as civilised as any of the most civilised nations of the ancient world, and in as early times as any of which records or tradition remain.' In the re-ascendency of Brahmanism after the overthrow of Buddhism, the prime defect

of which was a want of knowledge of the true God, and to which was subsequently added a relic worship, and an over-fondness for asceticism, the writers who are now regarded by the Hindus as authorities, introduced the outrageous matters which at the present day are the shame and degradation of the followers of this extraordinary faith. Major Moor observes that, with a little alteration, the first part of Juvenal's fifteenth satire, beginning 'Quis nescit,' might be applied to the teachers of Hinduism as now seen, as happily as to the Egyptians, the objects of Juvenal's severity. It is a picture of the Hinduism of the present day:—

'Who knows not that there's nothing vile nor odd,
Which brain-sick *Brahmans* turn not to a god?
Some of those blockheads bulls and cows adore;
Fish, reptiles, birds, and snakes, as many more;
A long-tail'd ape some suppliants admire,
Or man-like elephant, a god the sire;
One race a god, half-man half-fish, reverse,
Others to unsightly moieties adhere;
Hosts to a stone's high deity bend down,
While others sticks with adoration crown;
Nay, vegetables here hold rank divine,—
On leeks or mushrooms 'tis profane to dine.
O holy nation, where the gardens bear
A crop of gods throughout the tedious year!'

It has been remarked that the characters of many of the Hindu deities are faintly indicated by the term immoral. Everything that is gross and sensual and wrong is to be found as ordinary acts of their deities; and the followers of these faiths present the extraordinary spectacle of a people with purer lives than is to be found in the idolatrous or demonolatrous systems of religion which they follow. They have a proverb amongst themselves, — 'Yatha devas, Tatha bhaktah,' i.e. As is the god, so is the worshipper, — happily not applicable to their own conduct. For in their domestic lives they are gentle, not aggressive; modest, reverent, respecters of authority, temporal and spiritual; desirous of knowledge, seekers of the truth, patient under mental or bodily labour; diligent in their callings, frugal, temperate, and chaste; living with one wife, though Hindu law permits a plurality; amongst the entire Hindu races offences against the person are rare, and it is only amidst the licence of the temples that gross polygamy is common, and is even there confined to the habitues of the shrines.

In all these remarks, however, it is necessary to bear in mind that the Hindus comprise many races, and dwell in many different climates. Amongst some of the races, and particularly amongst the non-Aryan tribes, there is much drinking of alcoholic fluids, which with other of their races is almost unknown. Mountstuart Elphinstone says their most prominent vice is want of veracity. They do not even resent the imputation of falsehood. The same man would calmly answer to a doubt by saying, 'Why should I tell a lie?' who would shed blood for what he regarded as the slightest infringement of his honour. Hindus are not ill fitted by nature for intrigue and cunning, when their situation calls for those qualities. Patient, supple, and insinuating, they penetrate the views of the persons with whom they have to deal. Like all that are slow to actual conflict, they are very litigious, and much addicted to verbal altercation. 'The manner in which often,' Dr. Chevers writes at p. 451, 'a crowd of Bengalis fall upon a victim of

their displeasure, and beat and tear him into pieces with sticks, fists, feet, hands, and any weapon which may happen to have been brought or caught up, until the body lies in the midst of them a mere bloody, featureless, disjointed, broken mass, is scarcely characteristic of the reputed mildness of the national character.'—*Abbé Domenech's Deserts of N. America; Dunsen's Egypt; Brown's Telooogo Dictionary; Caldwell's Comparative Grammar, also Tinnevely Shanars; Calcutta Review; Coleman's Mythology; Cunningham's Bhilsa Topes; Cunningham's History of the Sikhs; Elliot's History of India; Elliot's Supplemental Glossary; Elphinstone's Hist. of India; Hodgson in Bengal As. Soc. Transactions; Latham's Descriptive Ethnology; Marsden's Marco Polo; Max Müller's Chips; Marshall's Stat. Rep.; Moor's Pantheon; Mullen's Hindu Philosophy; Sherring's Castes and Tribes; Strange's Hindoo Law; Tennant's Ceylon; Tod's Rajasthan; Tod's Travels; Vigne's Travels; Ward's Hindoos; Wilson's Glossary; Wheeler's Mahabharata; Wheeler's Ramayana; Wheeler's Travels of a Hindoo; Wilson in Royal As. Soc. Transactions; Williams' Story of Nala.*

HINDUSTAN is a term which the people of Europe apply to British India generally. To the people of India, however, and to Europeans residing there, the name is restricted to that part of the country which lies between the Himalaya and the Vindhya mountains, and from the Panjab in the N.W. to Bengal in the S.E. This was the Aryavarttha or Aryan country of the Sanskrit writers, who also called it *Punya bhumi*, or the Sacred Land. Jutting to the south of this portion is a triangular promontory or peninsula, known to the Hindus as the Dekhan (Deccan), meaning the south; and these two portions form the region which is briefly to be noticed here.

Rivers and Mountains.—The northern portion is watered by the Ganges and the Indus and their tributaries, and it is known as the Indo-Gangetic plain. It is an immense extent of flat country, stretching from sea to sea, is entirely composed of alluvial deposits of very late geological age, and it separates the hilly ground of the Peninsula from the mountain ranges of Sind, the Panjab, the Himalaya, Assam, and Burma. Several of the southern rivers are large,—the Nerbadda, Tapti, Mahanadi, Godavery, Kistna, and Cauvery; but none of them equals in importance the Ganges, or the Indus, or the Brahmaputra, which, with the Irawadi of Further India, are the only rivers navigated by steam flotillas, though the Godavery has boats trafficking on it. The marine lagoons, on the east and west coasts, connected by canals, are available for inland navigation, and most of the rivers and their affluents are utilized for irrigation. The east coast of the Peninsula is washed by the Bay of Bengal, and its west coast by the Arabian Sea; but the great Indo-Gangetic plain is mountain girt. To the west are the Khirtari, the Suliman, and the maze of mountains separating India from Afghanistan; to the south are the Vindhya; and on all the north Hindustan proper is bounded by the stupendous Himalayas.

The Aravalli hills are connected by lower ranges with the western extremity of the Vindhya mountains, on the borders of Gujerat, and stretch northwards to a considerable distance beyond Ajmir, in the direction of Dehli, forming the

division between the desert on the west and the central table-land. It would be more correct to say the level of the desert, for the south-eastern portion, including Jodhpur, is a fertile country.

Amrkanlak, a great plateau, forms the watershed of the Mahanadi, Son, Tons, Johilla, and Nerbadda. These rivers, though large and full of water even half-way from their mouths, are very irregular in the slopes of their beds, and are disturbed by frequent rapids, so that, owing to these impediments, increased still further by the rocky character of the river beds or their banks, navigation is limited for the most part to the lower portions of their course.

Central India is a table-land of unequal surface, from 1500 to 2500 feet above the sea, bounded by the Aravalli mountains on the west, and those of the Vindhya on the south, supported on the east by a lower range in Bundelkhand, and sloping gradually on the north-east into the basin of the Ganges. It is a diversified but fertile tract. The plateau is known as the Patar, and many parts are covered with jungle. The Aravalli hills have afforded protection to the most ancient sovereign race in the east or west,—the ancient stock of the Suryavansa, the Heliadae of India, or children of the sun, the princes of Mewar, who, when pressed, were wont to retire to its fastnesses, only to issue again when occasion offered.

The *Vindhya* mountains north of the Nerbadda river, and the Satpura range south of that river, run east and west, and separate Hindustan proper from the Dekhan.

In that peninsular Dekhan or southern portion are two mountain ranges, known as the Eastern and Western Ghats. These ghats run in wavy lines southwards towards Cape Comorin, approaching and receding from the coast, and leaving, between them and the sea, low, alluvial, fertile tracts from 50 to 100 miles broad. The region enclosed within the ghats has several extensive plateaus, rising 1200 to 3000 feet above the sea, as in the Ceded Districts, Coimbatore, Hyderabad, and Mysore; and in the more southern parts are spurs rising higher, with particular names. For instance, to the north of Coimbatore the chain rises abruptly to 8000 feet, as the *Neilgherry* range, and continues northward as the mountains of Coorg. The rainfall, which is great on the western coast, is less on the Neilgherries, being 82 inches at Dodabetta, and 48 inches at Ootacamund. Farther north, in the Nagar district of Mysore, where are many rounded or table-topped hills 4500 feet high, often cultivated to that height, and rising in some places to upwards of 6000 feet, the climate of the western part is very humid, and particularly so at the town of Nagar or Bednur, 4000 feet high, on a spur of the western chain, where inclement rain is said to last for months.

The *Travancore* group presents a striking analogy to the island of Ceylon. The hills are loftiest at the extreme north of that district, where they stretch east and west for 60 or 70 miles, separating the districts of Dindigul and Madura.

The *Palney* mountains are west of the Dindigul, the *Animallay* south of Coimbatore, and the *Shervagiri* south-west of Madura.

Climate and Seasons.—A country with such varied features, and extending through 28 degrees of latitude (8° 8' to 36° N.), has climates and products commensurately varied. In Hindustan the

people usually arrange the year into three periods,—the Choumasa or Burk'ha, which is the rainy season of four months' duration; after which is the Secala, or Jhara, or Mohasa, the cold season; followed by the Dhubbala or K'hurasa, or hot season. This division indicates generally the course of the seasons in all Hindustan, though in one locality or another the rains or the hot or cold seasons may be somewhat more or less prolonged.

Winds and Rains.—The S.W. monsoon blows from the Southern Ocean, and is loaded with vapour. This is deposited largely along the sea-face of the Western Ghats, and between them and the sea, from 70 to 100 inches at the sea-level, and as much as 250 inches on the mountain face. At Mahabaleshwar it amounts to 260 inches annually. In the Southern Konkan, especially in the Sawantwari district, the rains are as heavy as in Canara. At Bombay the rains last from June till the end of September, and the fall is only 71 inches, which is considerably less than at any point farther south on the west coast. At Tanna, however, the average fall is more than 100 inches. This monsoon wind passes over the plains of Bengal, and strikes on the Khassya mountains and the whole length of the Himalaya, discharging itself in heavy rains. From April till August it blows from the east of south, in August S.S.E., and in September more easterly, lowering the temperature of Bengal and of the northern plains, though the plains of the Panjab continue excessively heated.

From the vernal till the autumnal equinox, the heat of a great part of India continues great; but after the autumnal equinox, the great mass of the Himalaya becomes intensely cold, and the plains of India generally become cool. Where the N.E. monsoon prevails, it is everywhere a land wind, except on the east coast of the Karnatic, the Malay Peninsula, and the Archipelago. In Malaya it blows over a great extent of sea, and is therefore very rainy; but in the Karnatic the width of sea is not great, so that the rainfall, though well marked, is less, and terminates long before the end of the monsoon, probably from the wind acquiring a more directly southerly direction, after the sun has reached the southern tropic. The amount of rain varies prodigiously in different parts of India, from almost none to 555 inches at Cherrapunji; but the rainfall affords no direct criterion of the humidity of any climate, for the atmosphere may be saturated with moisture without any precipitation taking place. Thus, while in Sikkin 1° for 300 feet is the proportion for elevations below 7000 feet, on the Neilgherry Hills it is about 1° for 340 feet; in Khassya, 1° for 380 feet; and the elevations of Nagpur and Ambala produce no perceptible diminution in their mean temperature, which is as great as that which would normally be assigned to them were they at the level of the sea. The chief fall occurs during the S.W. monsoon, between May and October. On the more southerly part of the Coromandel coast, on the east of the Peninsula, heavy rain falls in the months October to December, at the opening of the N.E. monsoon; and in all the more northerly provinces, a well-marked season of winter rains occur, commencing about Christmas, and extending to February. At this season, in the south of India, showers occur, but they have little effect on agricultural operations,—often, indeed, are injurious to cotton when

grown as a cold-weather crop. Subject to these exceptions, it may be said generally that the portion of India east of the 80th meridian has a rainfall of more than 40 inches, while the portion west of the same meridian has less than 40 inches. The region in which the fall is less than 30 inches includes almost the whole of the Panjab, a considerable part of the N.W. Provinces, a large part of Rajputana and Kattyawar, as well as almost the whole of the Dekhan and Mysore. In Sind, and in the southern portion of the Panjab, the rainfall is less than 15 inches, and is extremely irregular; but in Sind the agriculture almost wholly depends on artificial irrigation from the Indus. The parts of the country most subject to droughts are—(1) the W. and S. parts of the N.W. Provinces, the Panjab E. of the Sutlej; (2) the W. and N. States of Rajputana and of the Central Plateau, which border on the N.W. Provinces; (3) the districts of Bombay and Madras above the ghats, together with the southern and western regions of Hyderabad and all Mysore, except the strip lying close along the Western Ghats; and (4) the Madras districts along the east coast, and at the southern extremity of the Peninsula.

Dr. Royle gives the following arrangement of the countries of which the plants will grow in the different parts of India:—

Tropical and East Indian islands, tropical Africa, Brazil, Guiana, West Indies, and Florida.

East and west coast of Africa.

S. States of N. America, Egypt, N. of Africa, Syria, Mexican highlands, lower mountains of Spain.

S. of Africa, extra-tropical New Holland, S. America beyond 23½° S. lat. Mediterranean region.

Chino-Japanese region, Middle Andes, Peru, and mountains of Brazil.

North of Europe, north of Asia, & North America.

Arctic regions, mountains of Europe, Elevated Andes.

Travancore, Cochin, Malabar, Ceylon, Malay Peninsula, Chittagong, Bengal, Lower Assam. Coromandel coast, Northern Circars, Konkan.

Gujarat, Behar, Doab, Dehli, Malwa.

Mysore, hilly ranges in Dekhan, Rajputana.

Saharunpur and Northern Doab.

Dehra Doon, and Himalayan valleys to moderate elevations.

Neilgherries, Upper Assam, Himalayan mountains.

Himalayan mountains, regions of oaks and pines.

Himalayas above region of forest.

Crops.—Many parts, alike of the northern and southern districts, have two crops during the year,—one called the kharif or rain crop, sown in June, and reaped in October; the other, sown in October, and reaped in March and April, called the rabi or spring or cold-weather crop. The latter, embracing the months which approximate in temperature to those of the season of cultivation in colder countries, corresponds with them also in the nature of the plants cultivated, as for instance wheat, barley, sorghum, oats, and millet, peas, beans, vetch, tares, chick-pea, pigeon-pea, and lentils; tobacco, safflower, and chicory; flax, and plants allied to mustard and rape, as oil-seeds; carrot, coriander, and cummin, and other seeds of a similar kind, as ajwain, sonf, soya, and anison. In the rainy season, a totally different set of plants engages the agriculturist's attention, as rice, cotton, indigo, and maize, with sorghum, pulse, paspalum, most of the tropical legumes, as well as several of the cucumber and gourd tribes, together with the sesamum for oil, and the

varieties of the egg plant as a vegetable. The sunn and sunni species of *Corchorus* and *Crotalaria* cordage plants are also cultivated at this season. In the extreme N.W. countries, as, for instance, throughout Afghanistan, the climate is excessive. The cold of the winter is intense, the spring is damp and raw, and the summer, during which hot west winds prevail, is intensely hot at all elevations. The crops are chiefly wheat and barley, even up to 10,000 feet elevation. Rice is cultivated in great quantity at Jalalabad, 2000 feet; at Kabul, 6400 feet; and to a considerable extent at Ghazni, 7730 feet. Poplars, willows, and date-palm trees are extensively planted, as well as mulberry, walnut, apricot, apple, pear, and peach trees, and also the *Elæagnus orientalis*, which bears an eatable fruit. The vine abounds as in all warm and dry temperate climates. The majority of the Afghan and Tibetan plants are also, on the one side, natives respectively of the Caspian steppes and N. Persia, and of Siberia on the other.

The date is cultivated in Baluchistan up to 4500 feet; and a dwarf palm, *Chamarops Kitchiana*, *Griffith*, occurs abundantly in many places, but with a somewhat local distribution.

The area of the entire region under notice is 1,308,332 square miles, and its population 253,891,821. Excluding Assam and British Burma, both of which are beyond Hindustan in Further India, the British administrator 876,972 sq. miles of territory, with a population of 193,270,700 souls; and the states in alliance, feudatory and mediated, have an area of 573,772 square miles, with a population of 52,002,924.

Races.—The British territory is chiefly in the plains, and its population at the census of 1871 comprised 73½ per cent. of Hindus and Sikhs, 21½ per cent. of Mahomedans, and 5 per cent. of all others, including under this title Buddhists, Jains, Christians, Jews, Parsees, Bramhoors, and Hillmen. As this page is passing through the press, portions only of the 1881 census have been made public, and the figures are to some extent not up to date. Under the designation Hindu are included almost all who profess, in some form, the Brahmanic religions, or who are worshippers of local deities, of whom about 10½ millions are Brahmins, 5½ millions are Kshatriyas and Rajputs, 105½ millions of other castes; 8½ millions do not recognise caste; and 17½ millions are aboriginal tribes or semi-Hinduized aboriginals. In 1881 the numbers were as under:—

Hindus, . . .	187,937,450	Jains, . . .	1,221,896
Sikhs, . . .	1,853,426	Christians, . . .	1,862,634
Mahomedans, . . .	50,121,585	Aborigines, . . .	6,426,511
Buddhists, . . .	3,418,884	Others, . . .	1,049,435

The Buddhists are almost all inhabitants of Burma, and not of Hindustan, but with the incomplete census reports the residence respectively cannot be distinguished.

The ancestors of the present inhabitants, during the bygone ages, either as immigrants or as conquerors, have been entering India from the north and west. How little these have amalgamated, may be judged of by mentioning that out of 1030 villages lying here and there between the Jumna and Sutlej, and which were under British management in 1844, there were found to be 41 different tribes of agriculturists. And as a characteristic of the rebellion of 1857 and 1858,

it was observed that certain classes of villagers attacked and destroyed other classes;—the powerful hand of a regular government being temporarily removed, the ancient antipathies of race at once came into play. Dwelling amongst each other, door to door, but yet never mixing, neither eating together nor intermarrying, most of the races remain as distinct as when, 10, 15, 20, 30, 40, and 50 centuries ago, they came to the south. It is this separating system which has kept the stocks of Aryan and Turanian races of India pure. On the slightest suspicion as to descent, all intercourse ceases, and the descendants, in different lines from the same recognised ancestor, form new

castes. In this way almost every family of a few hundred years' duration is now broken up. The cause of the origin of this exclusive propensity is unknown, further than that the system of caste and the forms of Brahmanic worship commenced amongst the East Aryans after their passage of the Sutlej, and now every Aryan and most Turanian households are guided by its rules. The tribes and castes are everywhere numerous. It has been estimated that in Bengal alone, if their subdivisions and sects and clans be taken into account, they would amount to many thousands. The Bombay Census Report of 1881 enumerates 1245.

Population of India according to Census of 1881,—classified under Sexes and Religion, and distinguishing British Territory from Native States.

Province or State.	Total Population of all Religions.			Hindus.	Mahomm.	Aborigin.	Buddh.	Christ.	Sikhs.	Jains.	Others.
	Males.	Females.	Total.	M. & F.	M. & F.	M. & F.	M. & F.	M. & F.	M. & F.	M. & F.	M. & F.
Brit. Territory.											
Ajmir,	246,844	211,878	460,722	376,020	57,608	1,317,022	488,251	6,663	2,225	182	24,308
Assam,	2,503,703	2,377,723	4,881,426	3,062,140	1,819,286	21,704,724	2,055,822	155,800	128,135	549	1,009
Bengal,	34,025,501	34,911,270	68,936,771	45,452,806	23,483,965	2,425,054	187,555	37,338	1,855	525	20,920
Berar,	1,380,492	1,292,181	2,672,673	1,654,414	1,018,259	8,021,131	562,678	1	138,317	127,100	216,224
Bombay,	8,407,718	7,956,696	16,364,414	12,308,582	8,155,831	1,333,590	17	1,040	97	45,718	658,808
British Burma,	1,001,005	1,745,760	3,746,765	88,177	168,881	3,251,584	84,210	..	..	..	143,905
Central Prov.,	4,959,435	4,870,366	9,829,801	7,317,870	2,511,931	1,333,590	17	1,040	97	45,718	658,808
Coorg,	100,439	77,603	178,042	102,489	75,553	..	..	..	..	..	..
Madras,	15,421,043	15,749,688	31,170,731	28,497,678	1,933,561	..	1,535	711,080	..	24,973	1,804
N.W.P. & Oudh,	22,912,550	21,195,318	44,107,868	38,053,304	6,054,564	..	103	47,664	8,644	79,957	221
Panjab,	10,210,053	8,040,884	18,250,937	7,130,528	10,520,409	..	2,864	33,420	1,121,004	85,826	1,645
Total,	102,850,879	99,038,018	201,888,897	144,875,316	56,913,581	45,127,038	4,677,688	3,418,476	1,168,589	1,253,115	448,897
Feudatory St.											
Bombay,	3,572,355	3,368,894	6,941,249	5,526,408	758,229	369,216	12	6,837	80	282,219	3,308
Central Prov.,	867,687	842,083	1,709,770	1,385,280	9,914	220,318	..	24	2	198	93,989
N.W.P. & Oudh,	384,609	357,051	741,660	501,727	240,014	..	..	9	..	..	..
Panjab,	2,112,808	1,749,380	3,862,188	2,121,707	1,137,284	..	387	279	595,110	6,852	4
Total,	6,937,044	6,317,358	13,254,402	9,535,177	2,140,441	589,534	399	7,149	595,142	289,264	97,296
TI. Brit. Terri. (incl. Feud. St.)	109,787,923	105,355,376	215,143,299	154,410,492	59,053,922	46,716,574	5,267,222	3,418,976	1,175,738	1,848,257	546,101
Native States.											
Baroda,	1,139,512	1,045,493	2,185,005	1,852,869	174,980	101,522	..	771	..	46,718	8,146
Central India,	4,882,823	4,870,084	9,752,907	7,800,300	510,718	891,424	..	7,065	1,455	49,824	1,025
Cochin,	301,816	208,463	510,279	439,324	33,344	..	..	138,301	..	..	1,249
Hyderabad,	5,002,187	4,848,457	9,850,644	8,893,181	925,920	..	..	13,614	3,664	8,521	685
Mysore,	2,085,842	2,100,346	4,186,188	3,956,336	200,484	..	0	29,249	41	..	69
Rajputana,	5,544,665	4,723,727	10,268,392	8,839,243	861,747	166,343	..	1,294	9	878,072	21,084
Travancore,	1,197,134	1,204,024	2,401,158	1,755,610	146,909	..	..	498,542	..	..	97
TI. Native St.,	20,153,928	18,504,594	38,748,522	33,526,958	2,854,111	1,150,289	9	686,896	5,169	483,735	82,356
Grand TI. Pop.,	129,941,851	123,859,970	253,801,821	187,937,450	60,908,033	47,866,863	5,276,231	3,424,872	1,882,903	1,852,426	629,457

Many of the aboriginal tribes, now under the British or feudatory rulers, are broken nationalities, as the Gond, the Bhil, the Kathi, the Gujar, the Mair, the Meena, the Bhar, the Kurku, the Maria, the Khond, the Santal, the Kol. There are smaller tribes in Chutia Nagpur and the Tributary Mahals, wild mountain races in Julpiguri, with more compact clans of Mongoloid tribes in the Garo, Khasia, Jaintia, and Naga Hills, and in Tipperah and the Chittagong Hill tracts. On the hills and in the plains in the extreme south of Peninsular India, are the Nair, the Coorgs, the Beder, the Male Arasar, the Kadar, the Yanadi, the Irular, the Badaga, the Toda, the Kotar and Kurumbar, and the Saura, the Chenchwar of the Eastern Ghats.

The Kallar, Maravar, Teer, and Shanar occupy the plains in the very south of the Peninsula. Some of the predial tribes, the Dom, Pariah, Mhar, Holiyar, Mhang, Dhor, Chamar, Veddhar, Puller, Cherumar, are settled in the outskirts of the villages; but the Wadawar, Banjar, Lambari, Korawa, Bhaora, Bhatu, the Yerkala, some of the Kurumbar, and others, are homeless wanderers, moving amid the civilised settled dwellers of the plains, or secluded in the hills and forests, and are largely predatory, as are also the Sansi, Baori, Harni of the Panjab, and the Nat of Northern Hindustan. The Dravidians are in several great

nations, as the Tamilar, the Teling, and the Canarese.

The more compact of the smaller nationalities of Dravidian and Kolarian descent have found shelter in the mountain tracts on the south-west of Bengal proper, in the hills of Orissa, and in the valleys of the Satpura and Vindhya ranges, and in northern Gondwana, where they have formed many little states under chiefs claiming to be of ancient lineage, or cadets of Rajput houses.

The next in numbers are the Mahomedans. They are chiefly in Bengal, the N.W. Provinces, and the Panjab, with smaller numbers in Oudh, parts of the Bombay and Madras Presidencies, or dispersed among the Hindu communities. None of them have settled among the semi-civilised or wild aboriginal tribes. Many of them are of Arab, Afghan, Moghul, and Persian descent, but a considerable number are of converts from Hinduism; and the ancestors of the great bulk of those in Bengal, in number 21,704,724 in 1881, are recognised to have been non-Aryan aborigines, though their history is not known. The Mahomedans are in two sects, the Sunni and the Shiah, the former greatly preponderating, with smaller offshoots known as Mahdavi. In 1881, the total of the Mahomedans of Hindustan was 50,121,585.

Hindustan is partly under British, partly under

Rajput, Hindu, and Mahomedan rule. The principal of the allied states are those ruled over by Hindu sovereigns, and the Rajput families of Udaipur or Mewar, of Jodhpur or Marwar, of Jeypore in Rajputana, and the Rao of Cutch, and the Hindu sovereigns of Mysore, Travancore, and Cochin. The Mahratta rulers are of Kolhapur, the Gaekwar, Sindia, and Holkar; the Mahomedan states are Bhopal and Hyderabad. The French have possessions in Hindustan, with an area of 178 square miles, and 271,460 souls; and the area of the Portuguese possessions is 1086 square miles, with 407,712 souls, chiefly in towns or suburban.

The chieftains of Rajputana have about 93,000 armed retainers, mostly undisciplined.

The Hyderabad state is composed of portions of Telingana, Karnatica, Maharashtra, and Gondwana. Its ruler, styled the Nizam, is a Mahomedan, and most of its territorial nobility and its soldiery are of the same sect. The area, including Berar, is about 98,000 square miles, and its population 11,226,496.

In the Hyderabad state there are three large armed forces,—one body, the subsidiary force, at Secunderabad, of about 5000 of all arms; the other, the contingent, also of all arms, about 5000, at Ellichpur, Bolarum, Aurangabad, Hingoli, and Mominabad; and the Nizam has a large body of disciplined and undisciplined troops, stated in 1879 at 38,000 infantry, 8200 cavalry, and 725 guns.

The dominions of the Maharaja Sindia are 33,119 square miles in extent, with a population of 2,500,000, and revenue, 1 million.

The Maharaja Sindia can, under treaty agreements, maintain a regular force of 5000 men, and 36 guns. The fortress overlooking the town of Gwalior is held by British troops, who occupy also the neighbouring cantonment of Morar.

The Maharaja Holkar of Indore and Malwa rules over about 8400 square miles of straggling territory in Central India, with a population of about 750,000.

Bhopal adjoins Holkar's dominions to the eastward. Its ruler and the court are Mahomedans, of Pathan descent, as are likewise a large number of the population of the chief town. The territory contains 6760 square miles, and nearly 700,000 inhabitants. The number of armed retainers maintained is about 6000, with 39 guns of sorts. Bhopal has, from the earliest times, displayed an unwavering friendship for and loyalty to the British. In the most trying times of the Mutiny, when other states wavered, Bhopal stood true. The dynasty which rules it has never shown any love for aggression. A small colony of Mahomedans planted in the midst of a large Hindu community at the time of the break up of the Moghul empire, the descendants of that colony have been satisfied to maintain the dominion of their fathers. Pathans in Central India are as much foreigners to the Hindu population as are the British. The present and preceding ruler have been ladies, eminently just and devout.

The Native States of India can dispose of 64,172 cavalry, 241,068 foot soldiers, and 9890 trained artillerymen, working 5252 guns.

The Mewar state, of 11,614 square miles, and a population of 1,161,400 souls, was founded about A.D. 144. It is also called Udaipur from its capital. It is ruled over by a family of Surya-

vansa or Solar descent, Sisodia Rajputs, the Helidae of India, the highest in social rank and dignity of all the Rajput chiefs of India, descendants from Rama, king of Ayodhya.

The states of Doongurpur, Sirohi, and Partabgurh are offshoots from it; and Sivaji, the founder of the Mahratta power, was descended from the Udaipur family. By treaty in 1818, the British Indian Government undertook to protect this state.

The Jeypore state, of 15,000 square miles, and a population of 1,900,000 souls, is ruled by Cuchwaha Rajputs (Kachwaha), who also claim descent from Rama. It was founded amongst the Meena race, A.D. 967. The family furnished to the Moghul emperors some of their most illustrious generals; and Jey Singh II. (A.D. 1699) was a distinguished mathematician and astronomer. In 1803 the state entered into a treaty of alliance with the British.

The Marwar or Jodhpur state was founded about A.D. 1459 by Jodha, a descendant of the Rakhitor Rajput kings of Kanouj. Among the Rajput states it ranks next to Mewar and Jeypore. Its area is 35,672 square miles, and population, 1,783,600.

Bundi is ruled by a family of the Hara tribe of Rajputs. Its area is 2291 square miles, and population, 220,000; revenue, Rs. 5,00,000. Raja Omeda, in 1804, gave efficient assistance to Colonel Monson when retreating before Holkar; and in 1818, Maha Rao Bishen Singh concluded a treaty with the British, acknowledging the British supremacy.

The Kotah principality was formed in the beginning of the 17th century by the chief of Bundi, who was forced by the Maharana of Udaipur to cede half his territory to his younger brother. Its treaty with the British is in 1817, and this was the first of the Rajput states to co-operate with the British in suppressing the Pindaris. During the mutiny of 1857, however, the Maha Rao made no attempt to assist the Political Agent, who with his two sons was murdered. Area, 5000 square miles; population, 433,000; revenue, Rs. 25,00,000; tribute, Rs. 1,84,720.

Jhallawar was formed in 1838, when the Kotah principality was dismembered, and (8th April) British supremacy was acknowledged by Raj Rana Mudun Singh undertaking to pay Rs. 80,000 annually as tribute. Its area is 2500 sq. miles; population, 220,000; and revenue, Rs. 14,50,000.

Tonk is ruled by a Mahomedan ruler with the title of Nawab, descendant of Amir Khan, a famous predatory leader. Its area, 1800 square miles; population, 182,000; revenue, Rs. 8,00,000.

Kerrowlee is a Hindu state, with an area of 1878 square miles; population, 188,600; revenue, Rs. 3,00,000. Its maharaja, Muddun Pal, did good service during the mutinies.

Kishengarkh is an offshoot of Marwar. Its area, 720 square miles; population, 70,000 souls; and revenue, Rs. 6,00,000.

Dholpur is ruled by a Jat family. Its chief in 1803 co-operated with the British during the second Mahratta war, and its chief in 1857 aided the fugitives from Gwalior. Its area, 1626 square miles; population, 500,000; and revenue, Rs. 6,00,000.

Bharatpur is also a Jat principality. It was founded by Birj, a freebooter, and was largely extended in 1763 by his grandson, Suraj Mull.

In 1803, Ranjit Singh was ruling when Holkar, after the battle of Deeg, pursued by Lord Lake, took refuge in the fort. Ranjit Singh refused to surrender Holkar, and withstood four assaults before capitulating, and a new treaty was then formed. On the occurrence of a disputed succession, the fort was stormed by the British, 18th January 1826, and the young maharajah settled on the throne. Area, 1974 square miles; population, 650,000; revenue, Rs. 21,00,000.

The *Uwar* chiefship in Rajputana is under British protection, has an area of 3300 square miles; population, 1,000,000; and revenue, 16 lakhs. The state in 1771-1776 was carved out amongst the Meo and Rajputs by Pratap Singh, a Naruka Rajput.

Bikanir was founded about the close of the 15th century amongst small tribes of Jat, Bhatti, and others, by Bika Singh, son of Raja Jodh Singh of Jodhpur. He died A.D. 1505. In 1857, his successor greatly aided the British, and 41 villages were bestowed on him. Its area is 17,676 square miles; population, 539,000; revenue, 6 lakhs.

Jaysulmer, a Rajput state, entered into alliance with the British in 1818. Its chief's name was Moolraja. Area, 16,447 square miles; population, 73,700; revenue, Rs. 5,00,000. The people are chiefly Yadu Bhatti Rajputs, who claim a very ancient descent, and its ruler, the Maharawal, is head of the clan. Like the Raktor Rajputs, they are supposed to be descended from one of the Indo-Scythic tribes who penetrated into India at very remote times.

Dungurpur chiefship, formed by an offshoot from the Mewar family. Area, 1000 square miles; population, 100,000; revenue, Rs. 75,000.

Sirohi, a state in Rajputana, is ruled over by the Deora, a branch of the Chauhan clan. They claim direct descent from Deo Raj, a descendant of Prithivi Raj, the Chauhan king of Dehli. The earliest inhabitants were Bhils, succeeded by Rajputs of the Gehlot Pramara, and the present Deora Chauhan. Area, 3000 square miles; population, 153,000. Its ruler in 1815 transferred Mount Abu to the British as a sanatorium. During them utiny of 1857-58, its ruler, Rao Sheo Singh, did good service.

Baroda is a Native State in alliance with British India. It includes all the territories of the Maharaja the Gaekwar in different parts of Gujerat, lying between lat. 21° 51' and 22° 49' N., and long. 72° 53' and 73° 55' E., with an area of 4399 square miles, and population, 2,000,225. Its chief rivers are the Nerbadda, Mahi, Sabarmati, and Saraswati. Its people are Hindus, Jains, Parsees, and Mohamedans. Revenue, Rs. 1,02,64,820.

Cutch is a Native State in political relation with the Bombay Presidency, ruled over by a Jhareja Rajput prince. Population, 512,084; but there are many broken tribes amongst them.

Kolhapur is ruled by the representatives of the younger branch of the family of Sivaji, as the rajahs of Satara were of the elder. The Kolhapur family long struggled to head the Mahratta power, until, in 1731, Sahoji by treaty recognised Kolhapur as an independent principality. In 1760, the descendants of Sambaji became extinct, and one of the Bhonsla family was adopted. In the mutiny of 1857 the raja remained faithful, but his younger brother, Chimma Sahib, joined the rebels.

Area, 3184 square miles; population, 546,156; revenue, 10 lakhs.

Mysore is a Hindu state in the southern part of the Peninsula, with an area of 27,078 square miles, and, in 1881, a population of 4,186,188. Its Mulnad or hill country adjoins the Western Ghats; its plain country is well cultivated, but the rainfall is not abundant and is irregular, and in 1876-77 it failed, and above a million of the inhabitants were lost. Its aboriginal tribes are Bedar, Kurubar or Kurunha, Lambani, Koracha, and Pariahs. The languages are three dialects of Canarese.

The *Cochin Rajas* claim descent from an ancient dynasty who once ruled from N. Canara to Cape Comorin. The state was conquered by Hyder Ali, and retained by Tipu, until, in 1792, it was released by the British. In 1809, the family rebelled against the British, and, by a treaty then made, a subsidy of Rs. 2,76,037 per annum was exacted. Area, 1131 square miles; population, 399,060; revenue, Rs. 10,57,497.

The *Travancore* rulers are of the Kshatriya race, and of the Hindu religion, but, with many of their subjects, Nairs and others, they follow the descent by the female line. At the commencement of the 18th century, the territory now known as Travancore had a number of chiefs, who were constantly at war, but they were gradually brought under the authority of the Raja of Travancore, Wauji Baula Perumal, 1758 to 1799. He was a steadfast ally of the British, who aided him in return; and in 1789, being attacked by Tipu, the British declared war, and, on the conclusion of peace in 1792, Tipu restored all the territory he had wrested from Travancore. A treaty was agreed to in 1795. Any failure in the direct female descent requires the selection and adoption of two or more females from the immediate relatives of the family, who reside at certain places in Travancore. The maidens adopted for this purpose become Tumbruttis, and are styled Ranis of Attingah on certain ceremonies performed publicly at Attingah, and in the chief temple of Trevandrum. Area, 6653 square miles; population, 1,262,647; revenue, Rs. 42,85,000.

The family of the Zamorin of Calicut and the Bibi of Cananore also follow uterine descent.

The *Pudukottah* chieftain is styled the Raja Tondaman Bahadur. At the siege of Trichinopoly in 1753, the British army greatly depended on the Tondamans' fidelity and exertions for provisions. They and most of their subjects are of the Kollar race. Area, 1037 square miles; population, 268,750; and revenue, Rs. 3,24,136.

The *Sundur* Raja is a Mahratta of the Ghorpara family. The territory is small, in a valley between two hills, 35 miles west of Bellary. In 1817, the chief Shevo Rao submitted to Brigadier-Genl. Munro, but his state was restored to him in June 1818, and a formal sunnud issued in 1826.

Banaganapilly is a jaghir held by a Syud family with the title of Nawab. Its area, 500 square miles; population, 35,200; revenue, Rs. 1,66,175. It has been in the family under successive grants from Mysore and Hyderabad, and formed part of the territories ceded to the British by the Nizam under the treaty of 1798, and it was confirmed by sunnuds in 1849 and 1862 in perpetuity for all legitimate successors.

Bengal is an administrative division of British

India, comprising Bengal proper, Behar, Orissa, including the Tributary Mahals, Assam, Chutia Nagpur, and the Native States of Hill Tipperah and Koch-Bahar. It extends from the meridian 82° to 97° E. long., and lies within the parallels of $19^{\circ} 40'$ and $28^{\circ} 10'$ N. lat. On its N.W. is the Native State of Rewa in Central India, also the districts of Mirzapur, Ghazipur, and Gorakhpur, belonging to the N.W. Provinces. On the north of Bengal, from the Chumparuu district as far east as the Bhutan Doars, the Himalaya range, running through the Independent States of Nepal, Sikkim, Tibet, and Bhutan, forms its northern boundary. Farther east, along the northern frontier boundary of Assam, lies a tract inhabited by the Akka, Dofia, Miri, Mishmi, Naga, and other wild tribes. Along its eastern frontier lies a part of Independent Burma; below that is the Manipur state; still farther south are various hill tribes,—the Naga, Lushai, Khyen, Mikir, etc.; and at the extreme south-east (south of Chittagong, which is the south-eastern district of the Bengal Province) is the Akyab district of Arakan.

On the south-west of Orissa is Ganjam in the Madras Presidency; on its west are the Tributary Mahal estates, and also the Sumbulpur and Balasapur districts of the Central Provinces.

In 1881, the population of Bengal was 69,536,861. About two-thirds of its population profess Hinduism in various forms, and about one-third are Mahomedans, with a small number of Christians. It is ruled by a Lieutenant-Governor. Many of the higher caste Hindus are recognised as former immigrants, but the origin of the vast bulk of the Mahomedans is obscure.

Assam is a province of British India, with an area of 41,798 square miles, and a population, in 1881, of 4,881,420. It is the valley of the Brahmaputra, but is east of the Ganges, and beyond the bounds of Hindustan.

Madras city is built on the western shore of the Bay of Bengal. It is the chief town of a British province of same name, with an area of 138,318 square miles, and a population, in 1881, of 31,170,631, comprising several distinct ethnic divisions of races speaking Canarese, Tamil, Telugu, Uria, and Tulu, with several uncultivated tongues of scarcely civilised aboriginal tribes.

The Bombay Presidency embraces an area of 197,875 square miles, and a population, inclusive of Feudatory States, of 23,395,663. The Feudatory States of this presidency have an area of 73,753 square miles, and, in 1881, a population of 6,941,249. Their names are Khairpur, Cutch, Cambay, Mahikanta, Narukot, Palanpur, Kattyawar, Rewakanta, and Surat. In the Konkan are Janjira, Jauhar, and Sawantwari; and in the Dekhan, Akalkote, the Dangs, Satara Jaghirs, Kolhapur, S. Mahratta Jaghirs, and Savanur. The languages spoken are Canarese, Mahrati, Gujarati, Konkani, and Sindi, and denoting distinct races. The more prominent of the aborigines are the Bhil, Koli, Ramusi, Mhar, and Mang.

Central Provinces, a British district lying between lat. $17^{\circ} 50'$ and $24^{\circ} 27'$ N., and long. 76° and $85^{\circ} 15'$, with an area of 112,912 square miles, and 11,548,511 inhabitants. The British districts comprise Oh'hattigarh, Jubbulpur, Nagpore, and Nerbadda; and there are thirty native principalities, viz. fifteen in Chutia Nagpur, with Bamra, Bastar, Kankar, Karond, Kawarda, Khairagarh,

Khondka, Makrai, Nandgaon, Patna, Raigarh Bargarh, Rairakhol, Sakti, Sarangarh, and Sonpur. It lies south of the Vindhya mountains, and the Nerbadda river flows through it. Its aboriginal peoples are chiefly Gond, Bhil, and Kol tribes.

Coorg, a British province, in lat. $11^{\circ} 56'$ to $12^{\circ} 50'$ N., was conquered in 1833. Its dominant race are brave mountaineers, 27,033 in number, the total population, in 1881, being 178,302. They are demon-worshippers. Canarese, Kodaga, Malealam, and Tulu are spoken.

Ajmir and Mairwara form a British province in Rajputana, of 2,710,680 square miles, and a population of 460,722. The chief aboriginal races are Mair and Gujar, the languages Hindi and Urdu. Mairwara is inhabited by Mair, Gujar, and other aborigines.

The North-West Provinces and Oudh are in the centre of Hindustan, in the valleys of the Ganges and the Jumna, and their affluents. They are ruled over by an officer, who is Lieutenant-Governor of the N.W. Provinces and Commissioner of Oudh. The combined territory has an area of 105,395 square miles, and a population of 44,849,619. The N.W. Provinces, part is the Hindustan proper of the Mahomedan classification, and three-fourths of its inhabitants are Hindus.

The Panjab province, in the extreme N.W., is ruled over by a Lieutenant-Governor. Its population, including the feudatories, number 22,712,120 souls, in an area of 219,714 square miles. The Hindus, Mahomedans, and Sikhs form the bulk of the population.

Central India is a political division, under the superintendence of a Political Agent. It has an area of 81,140 square miles, with a population of 7,699,502. In this political division there are 71 feudatory or mediated rulers, of whom 4 are Mahratta, 7 are Mahomedans, 17 are Bundela, 33 are Rajput, 6 are Brahman, and 4 belong to other races. The 6 feudatory states are Gwalior, Indore, Bhopal, Dhar, Dewas, and Jowrah.

The Native States under the political agencies for Central India, Bhopal, Baghelcund, and Western Malwa, are given in detail at page 458, British India.

This Feudatory Territory has three grand divisions. The N.E. division comprises the Native States of Bundelkhand and Rewa. The northern division consists of the northern and central districts of the Gwalior States. The S.W. division comprises the table-land known in modern times as Malwa, though far within the ancient limits of the province of that name, and the submontane territory between it and the Nerbadda, as also a considerable tract south of that river, extending to the Kandesh frontier. The 1st or N.E. division, extending from the Bengal Presidency in the E. to the Gwalior State in the W., includes Rewa and 35 other states and petty chiefships. Its area is about 22,400 square miles, its population about 3,170,000 souls, and its public revenues aggregate about Rs. 63,58,000. The 2d or N. division extends from Bundelkhand and the Saugor district, and has an area of about 19,505 square miles; its population is about 1,180,000 souls, and its public revenue about Rs. 67,65,000. The 3d or S.W. division goes on westward to the Bombay Presidency, and contains the remainder of Gwalior, Holkar's States, Bhopal, Dhar, Dewas, and other small

states. The area of this division is about 41,700 square miles, its population about 3,320,000 souls, and its public revenues about Rs. 1,30,00,000.

Bhil.—The desolate wilds and jungles of the western Satpura range, and parts of the country which extend from them to the Vindhya Hills, are occupied by Bhil tribes, who abhor field labour or manual labour of any kind.

Malwa.—Adjoining this are the richly-cultivated plains of Malwa, with occasionally intervening tracts of hill and jungle, from the Myhee on the west to Bhilsa on the east,—a stretch of nearly 200 miles, and from the crest of the line of the Vindhya to Mundlasore and Oomutwarra, a distance of 100 to 120 miles, and occupied by a thrifty agricultural people.

Hilly Tract.—This is succeeded by the more hilly and jungly tracts of Oomutwarra, Seronje, and Keechiwarra, with a scanty population.

Gwalior.—Northwards towards Gwalior the country becomes more open, except on the wild border tracts of Kotah and of Bundelkhand, till we come to the carefully-cultivated plain of Gwalior, stretching for a distance of 140 miles between the Chambal, Pahuj, and Sind rivers.

Bundelkhand is ruled by the Bundela race. A vast portion of Bundelkhand is hilly and unproductive, forming the northern slope of the tableland of the Vindhya.

Rewa is ruled by the Baghela race. The plains of Rewa are fertile, but the valley on the Sone to the south of the Kymore range is desolate. The people are indolent and untrustworthy. Though widely different in other respects, there is one characteristic common to the Baghel of Rewa, the Bundela of Bundelkhand, and the Rajput of Gwalior and Malwa,—a dislike to labour or service away from their homes. They generally leave tilling of the soil to the inferior and servile classes, and are regarded as the heads of the local society. Many of the Rajputs in the states of Central India give themselves up to sloth and the immoderate use of opium.

Malwa and Gwalior are great centres of trade. In Malwa, the towns of Indore, Bhopal, Ujjain, Mundipur, Rutlam, Dhar, Jowra, Augur, Nemuch, Shujawulpur, and Bhilsa are the principal marts. Indore is the capital of the Maharaja Holkar. Gwalior is the capital of the Maharaja Sindia.

Rajputana Agency.—Rajputana stretches from lat. 23° 15' to 30° N., and from long. 69° 30' to 78° 15' E., containing an area of 123,000 square miles, with a population estimated at 10,268,392, and includes twenty principalities, viz. :—

15 Rajput, viz. —

Mewar (Udaipur).	Bikanir.	Sirohi.
Jyepore.	Kotah.	Dungurpur.
Marwar (Jodhpur).	Kerrowlee.	Banswara.
Bundi.	Kishenghur.	Partabgurh.
Lawa.	Jaysulmir.	Jhallawar.
Shahpura.	Uliwar.	

2 Jat, viz. Bhurtpur, Dholpur.
1 Mahomedan, viz. Tonk.

In 1881, there were in Rajputana 8,839,243 Hindus, 861,747 Muhomedans, and 378,672 Jains, the aboriginal races being Ahir, Balal, Bhil, Chamar, Dhakur, Gujar, Jat, Kanta, Mina, and Sondhia. The Bhils are—in Dungurpur, 66,952; Udaipur, 51,076; Banswara, 48,045; and Partabgurh, 270.

Frontiers.—Around the borders of Hindustan are

many independent states, republics, theocracies, and democracies, with most of which the British Government, as a paramount power, have treaties or agreements. Commencing in the S.W. on the shores of the Arabian Sea, and enumerating the states in succession northwards, and again turning to the S.E., are—

Lus Beila, Baluchistan, Sewistan.

Near the *Dehra Ghazi Khan* district are the Bugti, Murree, Gurchani, Lughari, Kosah, and Khutran.

Near the *Dehra Ismail Khan* district are the Bozdar, Kusrani, Oshterani, Sheorani, and Waziri.

Near the *Kohat* district are Turi, Zymukht, Orakzai, Sepah, Buzoti, and Afridi.

Near *Peshawar* are the Momund, Usman-Khel, Ranizai, Swati, Bunurwal, and Judun.

Near the *Hazara* district, the Husanzai.

On the north are Ruka, Nari-Khorsam, Garhwal, Hundes, Nepal, Sikkim, Bhutan, Towang. Beyond Hindustan, in Further India, many tribes on the Assam borders, Manipur, Tiperah, and numerous Shau, Karen, etc., tribes in native Burma, Chittagong, and Arakan, with Burmese and Talaing in British Burma.

People.—Several civilised nations are found within the above space, in the Indian plains, but differing from each other, in manners and language, even more than those inhabiting any corresponding portion of Europe. The inhabitants of the dry countries in the north of Hindustan, which in winter are cold, are comparatively manly and active. The Mahratta, inhabiting a mountainous and fertile region, are hardy and laborious; while the Bengali, with their moist climate and their double crops of rice, where the cocoanut tree and the bamboo furnish all the materials for the construction of their houses unwrought, are more effeminate than any other people in India, and a love of repose, though not sufficient to extinguish industry or repress occasional exertions, may be taken as a characteristic of the whole people of the Bengal Province. Akin to their indolence is their timidity, which arises more from the dread of being involved in trouble and difficulties than from want of physical courage; and from these two radical influences almost all their vices are derived.

The men of *Hindustan* on the Ganges are the tallest, fairest, and most warlike and manly of the natives of Hindustan proper; they wear the turban, and a dress resembling that of the Mahomedans; their houses are tiled, and built in compact villages in open tracts; their food is unleavened wheaten bread.

Food.—Along the lowlands of the southern Peninsula, as in similar districts of Further India and China, rice is the favourite article of food with all whose means afford it; but the multitudes use it only as an occasional meal, and subsist on the pulses and millets and wheat. They are skilled cultivators of the soil, and by irrigation channels, canals, and tanks of every size, have supplemented the natural rains, producing largely for domestic use and for export, cinchona, cotton, coffee, hempo, indigo, jute, lac, opium, salt, silk, saltpetre, tea, and wheat; and, since the arrival of the British, coal has been largely worked, and tea and coffee have become great industries. Their domestic animals are the oxen and buffalo horned cattle, with camels, horses, asses, mules,

goats, and sheep, and they have domesticated the elephant and the yak, and have trained the various hawks used in falconry; they are brave and skilful fishers, and the sea could supply millions with food if the salt laws could be framed to permit its use for curing. Much loss of human life and domestic animals is caused by crocodiles, snakes, leopard, panther, bear, and tiger. Hindustan yields alum, gold, silver, iron, lead, precious stones, in which, as also in the copper and brass wares, they are skilled workers, and in much of their art, they continue unrivalled. The raw materials for glass-making are abundant, and they produce beautifully-tinted bangles for the wrist. Their weavers supply the whole labouring community with the useful cotton and woollen cloths; though Europe and America have been sending to Hindustan the cotton fabrics now used by the well-to-do classes, the strong cottons of the labouring classes are still holding their own. The British have introduced spinning mills, they are weaving by steam-power. In the finest muslins, they still surpass all other nations; and in their silks, silk and cotton fabrics, carpets, mushru, kinkhab, and shawls are producing articles the admiration of the world.

Languages.—There are two learned languages, Sanskrit and Pali, in which the religious books of the Hindus and the Buddhists are written. The Buddhist Scriptures of Tibet, Mongolia, Pegu, Ava, Siam, Kambogia, Cochin-China, and Ceylon, are all in the Pali, and the Vedas of the Hindus are in a form of the Sanskrit tongue. The Koran and the Hadis are religious books of the Mahomedans. Though the Koran has been translated into most languages, it is still retained in the Arabic by most of the people of that religion, but neither Arabic, Sanskrit, nor Pali are vernacular, and are understood only by the very learned. Throughout Northern Hindustan, the Hindi is the language of the people, but it has numerous dialects, designated by the names of the districts in which they are spoken, Panjabi, Multani, etc. One of these, the Brij-Basha or Brij-Bhaka, is the form spoken near Mathura, and takes its name from Brij, the tract about Mathura and Brindaban, where, in the Hindu mythologies, Krishna sported with the Gopin. The Rangari or Rangri dialect is bounded by the Indus on the west, Bundelkhand on the east, the Satpura Hills on the south, and Jeypore, Jodhpur, and Jeysulmir on the north. A language of mixed origin is in use amongst the Mahomedans of India, and employed by all races as the ordinary lingua franca in their intercourse with the people of the country. It was first reduced to writing and grammar by Dr. John B. Gilchrist of the Bengal Medical Department. It is called Hindustani, also Urdu, and is essentially Hindi, with large admixtures of words of Sanskrit origin or of Persian and Arabic, according as the speakers or writers are Hindu or Mahomedan. At present the Hindustani or Urdu, the Panjabi, and the Persian are written and printed in the same character; but the Arabic, Bengali, Burmese, Canarese, Chinese, Gujarati, Hindi, Mahrati, Malealam, Malay, Siamese, Singhalese, Tamil, and Telugu are all distinct tongues, each written and printed in a separate character. In the south of India, the Arabic numerals as used in Europe have been generally introduced into Government accounts. This was

on the recommendation of Sir Erskine Perry; and it has been supposed possible to use the Roman and Italian character for the other tongues.

Religion.—In Hindustan, amongst races ordinarily classed as Hindus, including 20 millions of non-Aryan aborigines, there is practised every form of idol-worship, nature-worship, spirit-worship, fetishism, and demon-worship; but the great mass follow what Europeans designate as Brahmanism, which is a reverence for deities described in the Vedas, Puranas, Tantras, religious books written by the Brahman teachers. The ancient history of India shows that there were four great religious eras. The Vedic, in which Agni, Indra, and other personifications of spiritual existences were propitiated with feasts and invoked in the hymns of the Rig Veda, and in which maidens selected their husbands in the Swayamvara, and monarchs sacrificed in the Aswa Medha. In the Brahmanic period the Kshatriya feasts were converted into sacrifices for the atonement of sins against Brahmanical law, and divine worship was reduced to a system of austerities and meditations upon the Supreme Spirit as Brahma. It was in this era that the Brahmans assumed the character of a great ecclesiastical hierarchy, and established that priestly dominion which still extends over the minds and senses of the Hindus of India. Thirdly, the Buddhist period, in which Sakya Muni appeared; and fourthly, the Brahmanical revival, during which Brahmans abandoned the worship of their god Brahma, and, with books styled the Puranas, reverted to the old national gods and heroes of the Vedic Aryans. In this era Vishnu came to be regarded as the Supreme Being, and Rama and Krishna as his incarnations. Followers of this form of belief are known as the Vaishnava, of whom there are numerous sects. Another deity, Siva, of whose origin nothing definite is known, is now largely worshipped by the Saiva religionists, of whom also there are many sects; and there are besides these, many smaller, active monotheistic sects. Mahomedans of Hindustan, 50,121,585 in number, are mostly of the Sunni sect, the Shiah sectarians being few in number. Christians, of all sects and denominations, do not number two millions; Jains, fire-worshippers or Zoroastrians, known as Parsees and Sikhs, are over three millions, and aboriginal races, with local cults and others, are 7,575,946 souls.—*Treaties, Engagements, Sunnuds, etc.; Annals of Indian Administration; Census Reports for 1871 and 1881; Elphinstone's History of India; Hooker and Thompson's Flora Indica; Royle's Productive Resources of India; Wils. Gloss.*

HINDYAN, a town in the province of Fars, at the mouth of the Kheirabad river, the Ab-i-Shereen of Timur's expedition, and perhaps the Arosis of Nearchus. It is navigable from the sea up to Zeitun, which latter town is only a day's journey (five farsangs) to Behbahan.—*De Bode.*

HINGINGHAT, a town in Wardha District, Central Provinces of British India, 21 miles south-east of Wardha, in lat. 20° 33' 30" N., long. 78° 52' 30" E.; population (1877), 9415. The cotton grown in the Wardha valley is esteemed one of the best indigenous staples of India.—*Imp. Gaz.*

HINGLAZ, a town in Makran, 12 miles inland from the Arabian Sea, and about 80 miles W. from the mouth of the Indus. It is a place of

HINGOLI.

Hindu pilgrimage, but is little visited, from the difficulties which attend the journey when made from most parts of Hindustan. It is at the end of the range of mountains dividing Lus from Makran. A small temple on the summit of a mountain is dedicated to Nani or Maha Mari, a form of Kali. Hinglaj Devi or Hingula Devi is the red goddess.—*Postans' Western India*.

HINGOLI, lat. 19° 43' N., long. 77° 11' E., in the Dekhan, south-east of Aurangabad, and 185 miles north-west of Hyderabad; the mean height of the village is 1495 feet according to Scott, and 1478 feet according to Wilson. It is a military station of the Hyderabad contingent.

HINOM. At the union of the vales of Hinom and Jehoshaphat, there is a basin of water where the fire of the Hebrew temple was preserved; and beyond it, where a clear stream runs through a very narrow inlet between the Mount of Olives, and that where Aceldama and the other sepulchres stand, are many olive trees.—*Skinner's Overland Journey*, i. p. 218.

HIOUNG-NU, the Hun. De Guignes places Attila and the greater part of his army among the Turk race.

HIPALUS, a Greek of Alexandria, the commander of a trading vessel in the Red Sea, some time prior to or during the reign of the Emperor Claudius, or about A.D. 47. He took advantage of the steady blowing of the monsoon winds, and sailed direct to the coast of India, at which he arrived at Musiris or Barace, somewhere between Goa and Tellicherry. His name was given to the S.W. monsoon. A few years before this, as a freedman of Annus Plocamus was collecting tribute on the coast of Sabæa, he was carried out to sea, and across the Arabian Sea to the port of Hippos in the island of Ceylon, where he was kindly treated, was presented with a larger ship, and on his return the king of the country sent four ambassadors to the Roman emperor, and a raja or chief to be the captain to manage the ship. Mr. Roberts supposes the port of Hippos to be the Greek words Hippos and Oros, or horse mountain, a Greek translation of Kuthri-Malei, a hill on the N.W. coast of Ceylon.—*Roberts*, p. 81; *India in the 15th Century*. See Musiris.

HIPPOBOSCA EQUINA. *Linn.* Horse-fly.

HIPPOCAMPUS, a genus of fishes of the family Syngnathidæ. *H. mannulus* and *H. comes* of the Indian Seas, when drying, assume the figure of a horse's head, and are known to all as the sea-horse, which the name Kuda in Malay implies. The body is tapering and curled near the tail.

HIPPOCRATEA ARBOREA. *Rozb.* Kathapahariya, *HIND.* A tree of Assam, Chittagong, Tiperah, and Morung, also of the Kotah jungles. *H. Indica*, *obtusifolia*, *Grahamii*, and *viminea* are also known in India.

HIPPOCRATES, B.C. 460–361, the Bu-krat of the Arabs, was a learned physician, born B.C. 460 at Cos, an island in the Ægean Sea. He was the son of Heraclides and Phænarete, of the Asclepiadæ family. He travelled in Greece, Scythia, Colchis, and Asia Minor; also, it is supposed, in Egypt and Asia. It is to him that Galen attributes the theory of the four elements in the body, air, earth, fire, and water. He wrote 'On the Nature of Man,' and to him is due the important doctrine of crises. Hippocrates, and after him Galen, held a knowledge

HIPPOPOTAMUS.

of astronomy to be essential to physicians. He is supposed to be the Charaka of the Hindus.

HIPPOGLOSSUS, a genus of fishes of the family Pleuronectidæ. *H. olivaceus* is the Japanese halibut.

HIPPOLYTE, a genus of the crustaceæ of the tribe Palemoniens, of Milne Edwards, as under:—

- H. ventriosus*, *Edw.*, Asiatic Seas.
- H. quoyanus*, *Edw.*, New Guinea.
- H. spinifrons*, *Edw.*, New Zealand.
- H. spinicaudus*, *Edw.*, New Holland.
- H. gibberosus*, *Edw.*, New Holland.
- H. marmoratus*, *Edw.*, Oceanica.

HIPPOLYTUS, a Christian bishop who resided in Arabia, and is supposed to have written the treatise concerning the Peregrinations of the Apostles.

HIPPOPIAE RHAMNOIDES. *Linn.* A spiny shrub of the Panjab and N.W. Himalaya, in Kangra, Lahore, and Ladakh, with many vernacular names. Its stem is sometimes 5 or 6 feet in girth, with dioecious flowers, small, round, orange-coloured, acid berries, and narrow leaves like those of rosemary. Its acid fruit makes a good jelly with half its weight of sugar. Its stem gives a good fuel and charcoal.—*Stewart*; *Cleghorn*.

HIPPOPIAE SALICIFOLIA.

Lhala, . . . BHOT. | Buckthorn, . . . ENGL.
Tarwa, . . . CHUK. | Tser-khar, Szech, PANJ.

A willow-leaved shrub of the N.W. Himalaya. It is found in the Sutlej valley between Rampur, and at an elevation of 10,000 feet. Near the Chenab it is a stout shrub with spinous branches, and frequent in the valleys. The small yellow berries are extremely acid, but when ripe and boiled with sugar form an agreeable and wholesome preserve. The people use the branches for dry hedges and fuel, and they are considered village property. A species of *Prunus*, *Litai*, ripens here in September, with a tolerably sweet fruit, something like the cherry. A gooseberry, *Bilitai*, with small, woolly, sour berries, is common here also. A black-fruited *Ribes*, *Rasta*, resembling in taste the European red currant, is largely eaten by the people.—*Clegh. Pan. Rep.* pp. 67, 150; *Dr. J. L. Stewart*.

HIPPOPOTAMUS, the Behemoth of the Old Testament, is found in Africa in great numbers, and the existence of two species is suspected. The natives kill it with spears after enticing it into a pitfall. The flesh is delicate and succulent; the layer of fat next the skin makes excellent bacon, technically denominated hippopotamus speck at the Cape. The curbaj whip (hence the Spanish *Corvacho* and French *Cravache*) is made of the hide. The ivory of the great canine teeth is highly valued by dentists for making artificial teeth. No other ivory keeps its colour equally well; and the canine teeth are imported into England for this purpose, and fetch about 30s. per pound. One of the specific distinctions pointed out by M. Desmoulins is the comparative abrasion of the canines in the supposed two species.

The people of Rome several times had opportunities of witnessing hippopotami, amongst other wild beasts, collected for the triumphal exhibitions of their emperors. But for 1500 years, until 25th May 1850, Europe had not seen one. The Zoological Society of London then obtained a male, and afterwards a female, which bred. That received in 1850 was the first living seen in Great Britain since the Tertiary age of the world.

HIPPOSIDEROS.

The hippopotamus has been discovered in a fossil state in Ava and in the Sub-Himalaya, where there is an admixture of extinct and existing forms, well preserved,—remains of hippopotamus, rhinoceros, mastodon, peculiar forms of elephants, and very remarkable bovines, dissimilar from those now in India; also, of animals still existing in India, are found the fossil Emys (Pangshura) tecta. The embedded shells are all of species still living in the valley, and indicate that the changes have been gradual from the time that the hippopotami wallowed in the muds, and rhinoceroses roamed in the swampy forests, of the country where mastodons abounded, and where the strange forms of the sivatherium, dinotherium, and camelopardis existed.—*Eng. Cyc.*; *Hamilton's Sinai*, p. 339.

HIPPOSIDEROS, a genus of the mammalia of the order Chiroptera. The following Indian species may be named:—

<i>H. apiculatus</i> ,	<i>H. fulvus</i> ,	<i>H. murinus</i> .
<i>H. armiger</i> .	<i>H. galeritia</i> .	<i>H. nobilis</i> .
<i>H. ater</i> .	<i>H. insignis</i> .	<i>H. speoris</i> .
<i>H. bicolor</i> .	<i>H. Lankadiva</i> .	<i>H. penicillatus</i> .
<i>H. diadema</i> .	<i>H. larvatus</i> .	<i>H. Templetoni</i> .

H. cineraceus, *Blyth*, the ashy horseshoe bat, has only been found in the Panjab Salt Range.

H. murinus, *Jerdon*.

Rhinolophus murinus, *Ell.* | *Rhinolophus fulgens*, *Ell.*

The little horseshoe bat is of a mouse colour. It inhabits S. India, Ceylon, Nicobars, Burma, and Malaya.

H. speoris, *Jerdon*.

Rhinolophus speoris, *Schn.*, | *H. apiculatus*, *Gray*.

Blyth, *Ell.*

H. penicillatus, *Gray*.

R. Dukhanensis, *Sykes*.

The Indian horseshoe bat has a variably coloured body. It inhabits all India, Ceylon, and the Archipelago east to Timor.

Voulha is the Singhalese word applied to all bats.—*Mr. Blyth's Report*.

HIPTAGE MADABLOTA. *Gærtn.*

Gærtnera racemosa, *Roxb.*

Benkār, Khumb, . . BEAS.	Ati muktamu, . . TEL.
Endra, CHENAB.	Madhavitige, "
Bokhi or Utimukta, . . DUK.	Potu-vadla, "
Madmalti, PANJ.	Vadlaya rala, "
Chabuk, Churi, "	

Delight of the woods, is a large climbing shrub, with very beautiful white and yellow flowers in terminal racemes; petals fringed, four white, one yellow; one of the stamens is much longer than the rest; fruit unequally three-winged. The bark is a good sub-aromatic bitter. *H. obtusifolia*, *D.C.*, is a plant of China. It grows over all India, and is cultivated at Lahore.—*Riddell*.

HIRACLIUS, successor of Phocas, was taken prisoner by Khusru.

HIRAM, king of Tyre, was contemporary with Solomon, whom he assisted in building the temple of Jerusalem. He received from Solomon 20 villages of Galilee, and was a partner with Solomon in the Indian trade. He reigned B.C. 1025 to 992.

HIRANYA. *SANSK.* Gold or golden; hence—

Hiranya or Svarna, supposed to be Ireland.

Hiranya-Garbha, from Hiranya and Garbha, the womb.

Hiranyabaha, the river Sone. Its E. branch is also called Gujjhabate or Cohi.

Hiranya Kasipa, in Hindu mythology, Adaitya, an enemy of the Hindu gods, a king destroyed

HIRUNDINIDÆ.

by Vishnu as Narasimha. He is the same with Vijaga, son of Kasyapa and Diti.—*As. Res.* iii. p. 393. Hiranyaksha, from Akshi, the eye.

HIRLO. *MAHR.* Any warrior slain in battle. Cairns are accumulated over their remains.

HIRNEOLA AURICULA JUDÆ. *FR.* Jew's-ear, a fungus of Britain, and widely distributed. It is the *Teria iore* of Tahiti, and is known at Singapore as an article of commerce used as food.

HIRN PARDI, also Hirn-Shikari, a fowler race of the Peninsula of India, who call themselves Bhaora.

HIRUDO, the leech, one of the class Annelidæ, many of which occur in the south and east of Asia; they were early employed therapeutically by the Hindus, and the Arabs adopted their practice (*Royle*, *Hindu Med.* p. 38; and *Wise*, *Hindu Medicine*, p. 177). *Herodotus* alludes to one kind, *Bdella Nilotica*. *Dr. Pereira* infers that *Sanguisuga Ægyptiaca*, the species from which the French soldiers in Egypt suffered, is that referred to in the Bible (*Proverbs xxx. 15*) by the name of Olukch or Aluka. The latter, or Aluk, is also the Arabic name for leech. Six kinds of useful and six venomous leeches are mentioned in *Susruta*, and by *Avicenna*. But *Aristotle* makes no mention of them, and they do not appear to have been used in Greek medicine in the time of *Hippocrates*. *Pliny*, however, describes them very clearly, under the name of *Hirudines* and *Sanguisugæ*, and distinguishes two species. Eight species of medicinal leeches have been enumerated; the most common is the *Sanguisuga medicinalis*, *Hirudo medicinalis*, *Linna.*, which is a native of all the stagnant fresh waters. *H. officinalis* is distinguished by its unspotted olive-green belly and by the dark-green back. *H. medicinalis* is the kind usually employed in Britain. Its belly is of a yellowish-green colour, but covered with black spots, which vary in number and size, forming almost the prevailing tint of the belly, the intervening spaces appearing like yellow spots. On the back are six longitudinal reddish or yellowish-red bands, spotted with black, and placed on an olive-green or greenish-brown ground. Other species, figured by *Brandt*, are *H. provincialis*, *H. verbanæ*, *H. obscura*, and *H. interrupta*. In the United States they use *H. decora*. In India, leeches are extremely abundant, procurable in the tanks. *Hirudo tagalla*, also called *H. Ceylonica*, a land leech, lives in the thickets and woods of Ceylon, the Philippine Islands, and at elevations of 11,000 in the Himalayas.—*Eng. Cyc.* p. 212.

HIRUNDINIDÆ, a family of birds of the order Insessores, tribe Fissirostres, comprising the sub-family *Hirundinina*, with the genera *Hirundo*, *Cotyle*, and *Chelidon*, and the sub-family *Cypselina*, with the genera *Cypselus*, *Acanthylis*, *Collocalia*, and *Dendrochelidon*.

Hirundo rustica, the rustic swallow of Europe, Asia, Africa; is migratory, and common in the plains of India during the cold season; chiefly seen over water.

H. domicola, *Jerdon*, is the Neilgherry house swallow of S. India, Ceylon, Penang, Malacca, and Java.

H. flifera. This is a beautiful wire-tailed swallow, with prolonged middle tail feathers, and is found throughout India, N.W. Himalaya, and Kashmir.

H. daurica, mosque swallow or red-rump swallow, is found in N. and Central Asia, over all India from Nepal to Ceylon, and N. China.

- H. flavicollis*, *Blyth*, belongs to the group of republican swallows (*Petrochelidon* of the prince of Canino), and has similar habits to the *H. fulva* of N. America.
- H. Japonica*, *H. striolata*, occur in Japan.
- H. hyperythra*, *Layard*, Ceylon.
- Cotyle Sinensis*, the ordinary Indian sand martin, occurs together with *H. riparia*.
- C. urbica*, the martin of Europe, Africa, Asia, and Siberia, is somewhat rare or local? in India, and migratory.
- C. riparia*, the sand martin of Europe, Asia, Africa, N. America, is migratory in India, and local, and mostly replaced by *H. Sinensis*.
- C. rupestris* of S. Europe, is common in the high mountains of India, and there is a diminutive of it also in the *H. concolor* of Sykes.
- C. subocata*, *Hodgs.*, the dusky martin of Kashmir, Ladakh, Nepal, and in the cold weather, Panjab.
- C. concolor*, *Sykes*, the dusky crag martin of all India.
- Chelidon urbica*, *Linn.*, the English house martin, has been found in the Neilgherries.
- Ch. Cashmiriensis*, *Gould*, the house martin of Kashmir, where it is abundant.
- Ch. Nepalensis*, *Hodgs.*, the little Himalayan martin.
- Ch. dasypus*, *Bonap.*, of Borneo.

Sub-Fam. Cypselinæ, Swifts.

- Acanthylis sylvatica*, *Tickell*, the white-rumped spine-tail of all India, inhabits the jungles.
- A. leucopygialis*, *Blyth*, of Japan.
- A. coracinus*, *Mull.*, of Borneo.
- A. gigantea*, *Temm.*, brown-necked spine-tail of Neilgherries, Wynad, Malabar, and Ceylon. It is a magnificent swift.
- A. caudacuta*, *Lath.*, white-necked spino-tail, a splendid powerful swift of the Himalaya, Nepal, Sikkim and Bhutan, and China.
- Cypselus melba*, *Linn.*, the alpine swift of Southern India.
- Cy. apus*, *Linn.*, the European swift, is found throughout W. Asia, N. Africa, and Europe; is common in Afghanistan, Kashmir, and visits the Panjab in the rains.
- Cy. affinis*, *Gray*, the common Indian swift of the Panjab, Sind, all India; breeding in colonies.
- Cy. leuconyx*, *Blyth*, the white-clawed swift of all India, but rare.
- Cy. vittatus*, *Jard.* and *Sebly*, of all China, Malayan.
- Cy. Bataasiensis*, *Gray*, the palm swift, abounds in all the districts of India, Ceylon, Assam, Burma, wherever the palmyra and coconut palms grow; nest very small, and always placed on the leaf of the palmyra.
- Cy. Sinensis*, *Bonaparte*, of China.
- Collocalia nidifica*, *Lath.*
- Hirundo nidifica*, *Lath.*, | *H. unicolor*, *Jerdon*.
Blyth., *Horsf.* | *Cypselus unicolor*, *Jerdon*.
H. brevirostris, *M'Clell.* | *C. concolor*, *Blyth*.
- This, the Indian edible nest swiftlet, is found in the Neilgherries, Ceylon, Western Ghats, Coorg, Wynad, Malabar, Sikkim, Himalaya, Assam, Java, Malay Peninsula, Andamans, Siam, Cochin-China, and other islands of the Archipelago. The nest, when pure and of the first make, is composed entirely of inspissated mucus from the large salivary glands of the birds. It is very small. When these first make nests are removed, the second make are inferior.
- Co. linchi*, *Jerdon*, *C. fuciphaga*, *Hirundo fuciphaga*, edible nest swift of the Nicobars, on the rocky coast of the Bay of Bengal from Arakan south to Java. Its nest is more valuable than that of the *C. nidifica*.

Other species of *Collocalia* are found in the Eastern Archipelago as far as New Guinea, one from the Mauritius, and one or more from the Pacific islands.—*Jerdon*, pp. 155-185.

HISLOP, REV. STEPHEN, born 8th September 1817, at Dunse, Berwickshire. He joined the Free Church in 1844, and a munificent donation of Rs. 25,000 having been offered by Captain (General Sir William, K.C.B.) Hill, on condition

of founding a mission at Nagpur, Mr. Hislop went to it. He devoted his spare time to examination of the geology of Nagpur, and his writings appeared in the Journals of the Bombay As. Society for July 1853, the Royal Geological Society for 1855, on the Connection of the Plant-bearing Sandstone of Nagpur with the Coal Beds of Central India and Western Bengal; and the Bengal Asiatic Society's Journal, No. iv. 1855, contains another on the Age of the Carbonaceous Strata just referred to. In those papers Mr. Hislop described some of the numerous fossils which had been found in the tertiary deposit, and the sandstone, coal, and shells of the province of Nagpur. He employed his leisure in making a geological collection of the antiquities of the provinces around him; they now form the nucleus of the collection in the museum at Nagpur. He was drowned crossing a river.

HISSAR, municipal town and administrative headquarters of Hissar district, Panjab, lat. 29° 9' 51" N., long. 75° 45' 55" E.; population (1868), 14,133. The district, lying between lat. 28° 36' and 29° 49' N., and long. 75° 16' and 27° 22' E.; area, 353,973 square miles; population, 484,681. Hissar forms the western border district of the great Bikanir (Bickaneer) desert. It consists for the most part of sandy plains dotted with scrub and brushwood, and broken by undulations towards the south, which rise into hills of 800 feet, like islands out of a sea of sand. The soil is in places hard and clayey, difficult to till, but when sufficiently irrigated, highly productive. In these spots water is only reached at a depth of from 100 to 130 feet; the cost of a masonry well is seldom below £150. The sandy tracts are not unfrequently swept by storms, which greatly alter the face of the country. The jhul (*Salvadora oleoides*), the kavi or leafless caper (*Capparis aphylla*), and the jharberi (*Zizyphus napeca*) abound; their berries serve as food in times of scarcity. It has been much harried. After Nadir Shah ravaged the land, the Sikhs began their inroads; the Bhatti of Bhattiana struggled for superiority; and from 1795-1802, George Thomas, an Irishman, fought for dominion. Early in the mutiny of 1857, the local levies at Hansi and Hissar revolted, and all Europeans were either murdered or compelled to fly. The Bhatti rose under their hereditary chiefs, and the majority of the Mahomedan population followed their example, but were suppressed by a force of Panjab levies, aided by contingents from Patiala and Bikanir, under General Van Courtlandt.

The Tuar Rajputs (13,921) possess five or six villages. The Bhatti, now Mahomedans (22,008), trace their descent from Jaisal, of the Yadubansi stock. Both Tuar and Bhatti were marauding desert tribes. The Pachada, or men of the west, now Mahomedans, are also of Rajput descent. A religious sect known as Bishno worship their founder, Jambhaji, as an incarnation of Vishnu, and bury their dead in a sitting posture, in the floors of their houses or cattle-sheds. They consider even the touch of tobacco polluting. At their marriages, passages from the Mahomedan Koran and the Hindu Shastras are indiscriminately recited. They avoid destroying life, and inter any animal accidentally killed. The decayed town of Agroha is interesting, as being the original seat of the great mercantile class of Agarwala.

There are rock-cut inscriptions at Tosham.—*Imp. Gaz.*

HISSAR, a hill state north of Badakhsan, whose chief claims a Grecian origin. It yields copper ore, micaceous sandstone, inferior marble.

HISTA, a Malay measure of arbitrary length, the fourth of the dippa, about half a yard.—*Simmonds' Dict.*

HISTIOPHORUS, the sword-fish or fan-fish, is the Ikan-layer of Amboyna, the Dutch Zeyl-fish or Sail-fish, and the Sailor-fish of seamen. It is from 10 to 14 feet long, and is said to raise its dorsal fin and use it as a sail.—*Bennett.*

HIT, in lat. 33° 43' N., and long. 42° 27' E., is on the right bank of the Euphrates, has 1500 houses. It has bitumen springs on the left bank at Gasar Sadi. The people are boat-builders, prepare salt, bitumen, and naphtha, and burn lime. There is a bridge of boats here. It is the usual place where caravans cross the Euphrates between Baghdad and Damascus. With the smell of bitumen and naphtha outside the town the whole water and air is infected. It is undoubtedly the place mentioned by Herodotus under the name of Is, as furnishing bitumen for the building of Babylon. Near this, on the Euphrates, and a little below Samara on the Tigris, the country is mere alluvium. The works of salt and bitumen around Hit give a singular appearance to the country. The Euphrates near Hit has an average width of 350 yards, with a depth of 16 feet, and a current of three knots per hour in the season of the floods, when there are fourteen islands, on some of which are small towns. See Iran; Karezj.

HITOPADESA, SANSKR., from Hita, good, and Upadesha, teaching,—Good Advice, is the title of an ancient Sanskrit work, though it is but a rearrangement of an older one, called Pancha Tantra, or the Five Books, which itself has been translated several times and printed. But it has never attained the fame of its offspring, the Hitopadesa, and there are few, if any, of the vernacular languages of India into which the Hitopadesa has not been translated. It is classed by Hindu writers as a work on Niti, or polity, and it was designed for the instruction of princes, to prepare them for the duties of their future lives. The scene of the Hitopadesa is the ancient city of Pataliputra, situated at or near the present Patna. The king of that place, deploring aloud the wild and heedless lives of his sons, was overheard by a pandit named Vishnu-sarma, who undertook to make his sons versed in the principles of polity within the space of six months. To accomplish this he prepared the Hitopadesa, and accomplished his task of instructing and training the princes. The book consists of a series of fables, story within story, according to an oriental fashion. But the greater part of the work is occupied by verses cited from ancient writers in illustration and proof of the positions maintained by the interlocutors.

The Hitopadesa is divided into four books, entitled Mitra-labha (Acquisition of Friends), Suhrid-bheda (Separation of Friends), Vighraha (War), and Sandhi (Peace). The first two have a general interest, and are applicable to all classes of people. The last two books apply especially to kings and ministers. The stories are mostly concerned with animals, but there are a few in

which human beings are concerned. These are not edifying, and display a contempt for chastity, and a disposition to make merry over the misfortunes of easy-tempered husbands with intriguing wives. The nature of them may be inferred from such titles as The Old Man and his Young Wife, and The Farmer's Wife and her Two Gallants.

In the 6th century of A.D. era it was translated into Old Persian, by order of the emperor Nushirwan. From the Persian it was translated into Arabic in the ninth century, under the title of Kalila o Damna, a work which obtained great celebrity, and is still popular, Kalila o Damna being the Arabic representations of the Sanskrit names Karataka and Damanaka, two wily jackals who appear in the work, and are proverbial throughout the east for their craft and cunning. It was afterwards translated into Hebrew, Syriac, and Greek. The Hebrew version was made by John of Capua, towards the end of the fifteenth century, and from his work translations were made into the chief modern languages of Europe, and it became familiar to British youth under the designation of Pilpay's Fables. Two versions of the work were made into modern Persian by authors whose names are known, but their translations have been eclipsed, and their productions are obsolete. There is also a translation in Turkish. The most celebrated Persian translation is that of the renowned rhetorician, Husain Vaiz Kashifi, whose work, Anwar-i-Suhaili (Lights of Canopus), is famous throughout the Mahomedan world, and is scarcely less famous among the orientalists of Europe. Elegant versions of it were printed by Messrs. Eastwick and Woollaston, and that of the latter is published in an ornamental style. The Anwar-i-Suhaili has borrowed some stories from the Hitopadesa, but has greatly added to their number. The identity of the borrowed stories is palpable enough when pointed out; but nothing can well be more dissimilar than the two works, the one all plain and terse simplicity, the other florid, fanciful, ornate, and abounding with far-fetched hyperbole. The stately sententious roll of the verse of the Hitopadesa and the light and airy couplets of the Anwar-i-Suhaili are at the very opposite extremes of composition. Yet another distinguished Persian author bestowed his labours upon the Arabic edition of the work. Abul Fazl, the celebrated minister of the Emperor Akbar, made a new translation. Though a professed rhetorician himself, and the author of several important works in the high style, he considered Husain Vaiz's version too florid and difficult for such a work; and he made a more simple translation in an easy narrative style, which became popular under the title of Iyar-i-Danish, Touchstone of Wisdom. This has again been translated into Hindustani, under the title Khirad-afroz, Enlightenment of the Understanding. The Hindus have thus had brought back to them, first in a Persian, and then in a modern Urdu form, the stories told by their ancestors in ages long gone by.

The text has been frequently printed in Europe, but the most esteemed edition is that of Professor Francis Johnson of Haileybury.

HITTITE, a dominant race mentioned in 1 Kings x. 29 and 2 Kings vii. 6. They held mastery in Syria in the era of the Hebrew judges and earlier kings. They were called Kheta

by the Egyptians, and Khatta by the Assyrians. In B.C. 835, Shalmaneser received tribute from all the kings of the Hittites. Their last monarch, Pirsiris (Pisiri), was defeated and slain B.C. 717, and Carchemish was made the seat of an Assyrian governor. But at one time the Hittite empire stretched from the Euphrates to the Dardanelles, and they disputed for several centuries the sway of Central Asia with Ramesside Pharaohs on the one side, and with Assyria's mightiest monarchs on the other. The Hittites were defeated, and their city Ketesh destroyed, by an Egyptian king (Rameses II. of Egypt?), about 1340 B.C. A great battle, figured in Sir G. Wilkinson's *Ancient Egyptians*, was fought between Rameses II. and the Hittites, near their sacred city of Kadash, which is shown as a city with a double moat, crossed by bridges beside a broad stream running into a lake. The lake has been generally identified with the Baheiret Homs, through which the Orontes passes south of Homs. The site of the city, as important in Hittite records as the northern capital of Carchemish, Lieutenant Conder has identified with the ruins known as the Tell Neby Mendeh. They lie on the left bank of the Orontes, four English miles south of the lake. The modern name belongs to a sacred shrine on the highest part of the hill on which the ruins lie, and the name of Kadesh still survives, an instance of the vitality of prior names lingering in the minds of the people long after they have forgotten the Roman, Greek, or Crusaders' names. Lieut. Conder writes,—'Looking down from the summit of the Tell, we appeared to see the very double moat of the Egyptian picture; for while the stream of the Orontes is dammed up so as to form a small lake 50 yards across on the S.E. of the site, a fresh brook flows in the W. and N. to join the river, and an outer line of moat is formed by earthen banks, which flank a sort of aqueduct parallel with the main stream.' He gives a full account of the ruins, the position of the place, and the disposition of the Egyptian forces before the battle.

Their writing character was displaced by the Assyrian cuneiform. The Assyrian King Sargon (B.C. 722-705) is mentioned in the Hebrew Bible. It was in the time of Sargon that Assyrian culture first gained a permanent footing in the W.; while the overthrow of Carchemish and the last relics of Hittite power in B.C. 717 naturally led to the disuse of the Hittite mode of writing, and the spread of the cuneiform characters employed by the Assyrian conquerors. The well-known passage in Pliny (H. N. vii. 57), 'Literas semper arbitror Assyrias fuisse; sed alii apud Egyptios a Mercurio ut Gellius; alii apud Syros repertas volunt.' Mr. Sayce sees in this an allusion to the Hittite graphic system. In this case, he remarked, the passage in Pliny would be a record of the three independent modes of writing which the east invented, and would contain a half-forgotten tradition of that strange system of hieroglyphics from which in all probability the syllabary of Asia Minor and Cyprus was derived. Hittite monuments have been found at Kiz Hissar, which is supposed to represent the Dana or Tyana of Xenophon, built, according to Strabo, on the tomb of Semiramis.

HI-UL or Hi-el, the grand festival of the German tribes of the Baltic.

HIUNRA of the Byansi, an avalanche.

HIWEN THSANG, a Chinese traveller who passed 17 years (from A.D. 629 to 645) in travelling through the countries lying to the W. of China, and especially in India, through countries which few had visited before him, and he describes some parts of them which no one has since explored. His chief object was to study the religion of Buddha, but his observations, geographical, statistical, and historical, are characterized by great minuteness and precision. He started from Pekin, and made his way, amidst hardships and difficulties, through Chinese Tartary to the region where Buddha had laboured. Near Talas, on his way to India, he fell in with the Great Khan of the Turks, a successor of Dizabulus, whom the Chinese traveller calls Shehu. His account is very like that of Zamarchus. The Khan occupied a great tent adorned with gold flowers of dazzling richness. The officers of the court sat in two long rows on mats before the Khan, brilliantly attired in embroidered silk, the Khan's guard standing behind them. Although he was but a barbarian prince under a tent of felt, one could not look on him without respect and admiration. He appears to have regarded the Wakhsh branch as the main Postu or Oxus.—*Stanislas Julien, Histoire de la vie de Hiwen Thsang*, pp. 55, 56; *Yule, Cathay*, i. pp. 165 and 234.

HLAINE, an elongated valley of Pegu.

HLA-PET. BURM. Literally, wet-tea. To the eastward of Bamo and Koung-tuno, hills are visible, peopled by cateran Kakhyen, and by breeches-wearing Paloung, employed peaceably in growing tea for pickling. This is the hla-pet, which is made up with a little oil, salt, garlic or asafoetida, etc., into a sort of pickle, and is essential to the comfort of every Burman, being partaken of on all ceremonial occasions. It is floated to Ava on bamboo rafts, so as to be retained always partially wet. It is eaten by the Burmese in small quantities after dinner, as Europeans eat cheese. They say it promotes digestion, and they cannot live in comfort without it. Colonel Burney mentions that the Burmese-Resident, proceeding to Calcutta in 1830, took a large supply of hla-pet with him, as a necessary of life, not to be had where he was going. Hla-pet is partaken of on many ceremonial occasions; and on the conclusion of law-suits, the bill of costs is always rounded off with a charge for pickled tea, as European agents' accounts are still rounded off with a charge for postages.—*Pytche*, p. 270; *Mason's Burma*; *Yule's Embassy*, p. 101.

HLWOT-DAU. BURM. The cabinet and high court of the realm of Burma, in which there are four woon-gye or chief ministers, assisted by as many woodonk.—*Yule's Embassy*, p. 3.

HNAU. BURM. A boat of Burma.

HNAU-BEN. BURM. A large tree, of pale yellow wood, preferred for making combs. It bears a large fragrant fruit, but worthless.—*Crawford*, i. p. 192.

HO, a Chinese measure of capacity, about 7½ gallons.—*Simmonds' Diet.*

HO. ARAB. He, He is; the name of God. Ho ul Aziz, He is glorious.

HO, More, Horo, in the Kol tongue, a man. In the mountains S.W. of Calcutta are the Dhangar, Oraon, the Kol, the Larka Kol or Ho, and the Khond. The Ho are a comparatively small tribe

of the Kol race. Their country proper is the part of the Singbhum district called Kolchan, a series of fair and fertile plains studded with hills. It is about 64 miles from N. to S. and 124 from E. to W., and has to the S. and S.E. the tributary estates Mohurbhun, Keonjur, Bonai, and Gangpur, inhabited by Uriya-speaking Hindus; to the east and north the Bengali pargana of Dhulbhum and district of Manbhum, and to the N. and N.E. the Hindi district of Lohardaggah.

The Ho is the most compact, the purest, most powerful and interesting and best-looking division of the whole Munda nation. The more civilised Ho have an erect carriage, and dignified, finely manly bearing, with figures often models of beauty. The occupants of the less reclaimed parts are more savage-looking. Their tradition is that they came from Chutia Nagpur, and that they brought with them their system of confederate governments of Purha, which they call Pirhi or Pir. The Ho have a tradition that they once wore leaves only, as the Juanga women till 1871 did, and not long since threatened to revert to them unless cloth-sellers lowered their prices. The Ho of the border-land have probably much intermixed with the Uriya. They are agricultural, but change their localities. A Ho bridegroom buys his bride, or rather his father buys her for him, the price being so many head of cattle. The Kol and Larka Kol are cognate with the Khond. The Ho language differs so little in phonology and glossary from the Munda, Bhumij, and Santal, that Captain Tickell's account of its grammar may be taken as that of the Kol language generally. The Ho are addicted to suicide; they have no endearing epithets. They erect menhir or slabs, and dolmen or tablets, over the graves of their dead. The dance of the Ho and Santal is not that of the Munda, though the last have something resembling it, and it can be made to assume a mournful cadence, as the same step and drum-beat is used at their funeral ceremonies. Colonel Dalton says (p. 106) the youths and maidens of the Ho mourn as they revolve, and lock up, keeping admirable time both in the movements of the feet and undulations of the head to the monotonous beat of the drums. They believe that the souls of the dead become bhoots (spirits), but no thought of reward or punishment is connected with the change.—*Captain Tickell, As. Soc. Jour.* ix. pp. 783, 997, 1063; *Lubbock, Origin of Civil*, p. 268; *Dalton's Ethnology of Bengal*, pp. 106, 184.

HOANG-HO, a great river in China, 3040 miles long, in lat. 39° 40' N., and long. 98° E., undoubtedly one of the finest rivers in the world. It takes its rise in the mountains of Tibet, and, after traversing the Koukou-Noor, enters China at the water province of Kan-su; it leaves it again to the sandy plains at the foot of the Alechan mountains, surrounds the country of Ortous, and, after having watered China from south to north, and then from west to east, throws itself into the Yellow Sea. The waters only assume their yellow tint after passing the Alechan and the Ortous. The river rises almost always to the level of the country through which it flows; and to this is to be attributed the disastrous inundations which it occasions, which are so fatal to China, but are of little consequence to the nomadic Tartars, who have only to strike their tents and move off elsewhere. In ancient times its mouth is said to have been in

lat. 39° N.; at present it is in 34°. The Chinese Government is obliged annually to expend enormous sums to keep the river within its bed. In the year 1799 it cost £1,682,000.—*Huc's Journey*.

HOANG-TI is the first historical Chinese emperor (B.C. 2698); and the Chinese historians allege that in his reign the inventors of sundry arts and sciences arrived from the western kingdoms in the neighbourhood of the Kouen Lun mountains.—*Yule, Cathay*, i. p. 35.

HOCKEY. A game of Tibet resembling hockey, and called Chaghan, is played on horseback, on a plain about 60 yards broad and 350 long, with a stone pillar at each end as the goal. The ball is somewhat larger than a cricket ball, and in Tibetan is called Pulu. The stick or Byntu is of the strong and straight bough of the almond tree, about 4 feet long, and let in at the top and passed quite through to the other end of a curved piece of solid birch-wood, about the size and shape of a drenching horn. The game is mentioned by Baber. It is played in every valley in Little Tibet, Ladakh, Yessen, Chitral. The Persians, who wanted to play on horseback, were the first who found a long stick necessary. This stick they called Chugan, hence the Byzantine *τχωνιστικον*, and the French Chicane, in which lawyers bandy about the unlucky clients. From the Chugan came the croquet-mallet, the golf-club, with all the family of spoons, drivers, clecks, bunker-irons, putters, and niblicks; came also the hockey-stick, and probably the bat, which was at first a thick club with a curved foot, a terrible weapon in the hands of a 'slogger.' The Chugan may have been the father of the racquet. In Byzantine descriptions of the game, a staff ending in a broad bend, filled in with a network of gut-strings, is mentioned. The Manipuri call it Kango-jai. They select a turfy piece of ground 400 yards in length by 200 in breadth. The ponies used are small, swift for their size, and obedient mouths. The club consists of a rattan as thick as an ordinary-sized walking-stick, and 5 feet long, and its lower end has attached, at an angle of 45 degrees, a cylindrical piece of hard oak-wood, 1 foot in length, and 1 or 1½ inch in diameter. The whole weighs about 1 lb. 10 oz. The ball is a globe 3 to 4 inches in diameter, cut out of the light bulbous root of the bamboo. The suppleness of the cane, the weight of the club, and the elasticity of the ball is such, that a well-delivered stroke will lift the latter about a hundred yards. Two sides are formed, 5 to 7 to a side. The ball is thrown up in the centre of the ground, and each party strives to drive it to the opposite goals. The club is held in the right hand and the reins in the left. All the skill of horsemanship and dexterity in the use of the club are called into full play. It is beautiful to see the game played by men expert in the exercise, and by ponies well trained, for the animals in the course of time acquire a perfect knowledge of the play, and enter into the excitement of it as well as the riders.

HOCOMLIA MONTANA. *Gibson.*

Samgga, . . . CAN. | Kudkee, . . . MAHR.
Tambut, . . . MAHR.

Grows in Canara and Sunda, on and close to the head of the ghats. Wood seldom runs large; is white, hard, and tough; used for agricultural implements.—*Dr. Gibson.*

HODADIN.

HODADIN, a peaceable shepherd tribe of Bedouins.

HODAIDA, on the east coast of the Red Sea, in lat. 14° 47' N., and long. 42° 53' E., a town of Yemen, with lofty buildings. It is on the N.E. side of a sandy bay, and sheltered by a point of land running N.W. About A.D. 1836 it was made the seat of government of that part of Yemen.

HODGSON, CAPTAIN J. A., author of *Journey to the Source of the Jumna*, Hot Springs at Jumnotri, etc., in *As. Res.* xiv. p. 128; *On a New Form of the Hog Kind in Sind*, in *Bl. As. Soc. Trans.* xiv. p. 423; *Journey to the Head of the Ganges*, in *As. Res.* xiv. p. 60; *Survey to the Heads of the Ganges and Jumna*, *ibid.*; *Latitudes of Places in Hindoostan*, *ibid.* p. 153; *Heights and Positions of the Himalaya Peaks*, *ibid.* p. 187; *Route from Katmandu to the Chinese Frontier*, *ibid.*, 1832, xiii. p. 513. Captain Hodgson and Lieutenant Herbert published *Astronomical Observations in Hindustan*, with a *Journal of the Survey of the Sources of the Rivers Ganges and Jumna*, and an *Account of the Positions and Heights of the Principal Peaks of the Himalaya Mountains*.—*Dr. Buist's Catalogue*.

HODGSON, BRYAN H., of the Bengal civil service, widely known for his researches into the natural history of the Eastern Himalayas, and the ethnology of the races and tribes dwelling in British India and its bordering countries. He was appointed Resident at the court of Nepal in 1821. He wrote on the Sheep inhabiting the Himalayan Region, in *Bl. As. Trans.*, 1841, x. p. 320; *On the Literature and Religion of the Buddhists*, Serampore 1841; *On the Buddha Literature of Nepal*, *As. Res.* xvi. p. 409; *Route from Katmandu to Tazedo*, *ibid.* xvii. p. 513; *On a New Species of Buceros*, *ibid.* xviii. p. 178; *Description of the Aquila Nepalensis*, *ibid.* part ii. p. 13; *Description of the Circetus Nepalensis*, *ibid.* p. 21; *Migration of the Natatores and Grallatores in Nepal*, *ibid.* p. 122; *On the Wild Goat and Wild Sheep in Nepal*, *ibid.* p. 127; *Description of the Ratwa Deer*, *ibid.* p. 170; *Of the Buceros Homrai*, *ibid.* p. 139; *Of the Wild Dog of the Himalayas*, *ibid.* p. 221; *On the Antelope of the Himalayas*, *Gleanings in Science*, iii. p. 152; *On a Species of Felis*, *ibid.* p. 177; *On Scolopacidae*, *ibid.* p. 233; *On the Musk Deer*, *ibid.* p. 329; *On the Cervus Jaral*, the Ratwa Deer, and the Tharai Goat, *ibid.* p. 371; *On the Chiru*, *ibid.* p. 387; *On the Mammalia of Nepal*, *ibid.* p. 442; *On the Manufacture of Nepal Paper*, *Bl. As. Trans.* i. p. 8; *On the Nepal Military Tribes*, *ibid.* ii. p. 217; *On the Aborigines of Nepal Proper*, *ibid.* iii. p. 216; *On European Speculations on Buddhism*, *ibid.* pp. 382, 425, 499; *Synopsis of Mammalia of the Himalayas*, *ibid.* v. p. 231; *On Nepal Ornithology*, *ibid.* p. 358; *On the Language of Buddhist Scriptures*, *ibid.* ii. p. 682; *On the Cuckoo of the Himalayas*, *ibid.* viii. p. 136; *On the Thibetan Type of Man-kind*, *ibid.* xvii. p. 222; *On the Aborigines of Central India*, *ibid.* p. 550; *Relics of the Catholic Mission in Thibet*, *ibid.* p. 225; *Route from Katmandu to Darjeeling*, *ibid.* p. 634; *On the Aborigines of Southern India*, *ibid.* xviii. p. 350; *On the Aborigines of North-Eastern India*, *ibid.* p. 451; *Note on Indian Ethnology*, *ibid.* p. 238; *On the Aborigines of the North-Eastern Frontier*, *ibid.* xix. p. 309; *Aborigines of the South*, *ibid.*

HOEI KING.

p. 461; *On the Law of Legal Practice and Police of Nepaul*, *Lond. As. Trans.* i. pp. 45, 258. It was his opinion that the Tamulian, Tibetan, Indo-Chinese, Tangus, Chinese, Mongol, and Turk are so many branches of the Turanian family.—*Dr. Buist's Catalogue*.

HODGSONIA HETEROCLITA. *Hooker*. *Tri-chosanthes* *het.*, *Roxb.*, is the most magnificent plant of the jungles in the valley of the Tista in Sikkim. It is a gigantic climber, allied to the gourd, bearing immense yellowish-white pendulous blossoms, whose petals have a fringe of buff-coloured curling threads several inches long. The fruit is of a rich brown, like a small melon in form, and contains six large nuts, whose kernels (called Katior-pot by the Lepcha) are eaten. The stem when cut discharges water profusely, from whichever end is held downwards. It is a new cucurbitaceous genus, found in the Terai, clinging in profusion to the trees, and also 5000 feet up the mountains. It grows also in the forests east of Chittagong. The long stem, like almost all woody climbers, is full of large vessels; the juice does not, however, exude from these great tubes, which hold air, but from the close woody fibres.—*Hook. H. J. i.* p. 395, ii. p. 350.

HODHAD, king of Yemen, father of Balkees, queen of Sheba; lived about the beginning of the Christian era. See Balkees.

HOD'HU, an ancient name of India.

HOE, a secret society of the Chinese, into which the members are initiated. The concluding ceremony consists in pricking the middle finger of the right hand, dropping the blood into a bowl of arrack, from which each of the candidates drink, and are then saluted as brethren.

HOE is the digging implement of the labourers of India; its forms are called in Hindi, hat'hia, kalpi, kharpa, mamati, rambha, and ramp.

HOEI-HOEI. The Chinese and Manchu call by the name of Hoi-hoi all the Mahomedan tribes who live under Chinese dominion. This word, therefore, has ceased to designate a nation. As the Uigur Hoi-hoi, called simply Hoi-hoi under the Mongol dynasty of Yuan, were Mahomedans, this name is applied by the Chinese to all those of the same religion, in the same manner as the Russians are often called Greeks, because they are of the Greek Church. The inhabitants of the towns of Little Bokhara are in part descendants of the ancient Uigur or Hoi-hoi, and consequently Turk; in part Sarti, or Bokharians, who are scattered as merchants all over Central Asia, and who are Iranians. There are many of them at Peking, Hang-chu-fu, Canton, and other commercial cities of China. Their mother-tongue is Persian, but they also speak the oriental Turki, which is the general language of Turkestan, and the most diffused in Little Bokhara.

HOEI KING, a Chinese Buddhist traveller in India, Khotan (Yu-than), and Tibet, in A.D. 899-900, along with Fa Hian, the Fo-kue-ki of Remusat, Klaproth, and Landresse. Fa Hian, with Hoi King and other Chinese pilgrims, reached Yu-than or Khotan in A.D. 899-900. Fa Hian then travelled by Tsu-bo and Yu-hoi and over the Tsu-Ling mountains southwards to Kie-Chia, the modern Ladakh, where he rejoined Hoi King. From Kie-Chia the pilgrims proceeded westward to Tho-ly, which they reached in one month. They came to India overland by way of Tartary

and Kābul, visited Ceylon, and sailed thence to Java. On his return, Fa Hian left behind him an account of his travels, called Fo-kue-ki, or an account of the Buddhist countries. At the time of his visit Buddhism was still the dominant religion, though Vaishnavā doctrines were gaining ground.—*Cunningham, Ladakh; Cal. Rev.*

HOFFMEISTER, author of *Travels in Ceylon and Parts of the Himalayas to the Borders of Thibet*.

HOG, Indian wild boar, *Sus Indicus*.

Khanzir,	ARAB.	Porco,	It., PORT.
Varaha,	BENG., SANSK.	Sus, Porcus,	LAT.
Handi, Mikka,	CAN.	Babi, Babi alas,	MALAY.
Jewadi,	"	Babi utan,	"
Sun,	DAN.	Dukar,	MAHR.
Varken, Zwijs,	DUT.	Svinza,	RUS.
Cochon, Pourceau,	FR.	Puerco,	SP.
Schwein,	GER.	Svin,	SW.
Paddi,	GOND.	Pandi,	TEL.
Choirs,	GR.	Hweh-hweh,	WELSH.
Jangli soor, Soor,	HIND.		

The wild hog abounds in many parts of India, and the males attain to a very large size. It is generally believed that there is no specific difference between the wild hog of Europe and India. The adult males dwell apart from the herd. The wild boar is constantly hunted by Europeans on horseback, with the spear; natives of India hunt the boar with dogs. Spearing the wild hog is one of the favourite sports of British officers in India.

All the wild hogs in the Archipelago are small animals compared with the wild boar of Europe, or even with that of continental India.

Sus verrucosus, so called from the fleshy excrescence on the sides of the cheeks, has a grotesque and a formidable appearance, but is in reality a timid animal. Their number in Java is immense in particular districts.

Sus Andamanensis, Blyth, a small race in the Andamans.

Sus Zeylanensis, Blyth. Mr. Blyth distinguished this from the hog common in India. The skull approaches in form that of a species from Borneo, the *Sus barbatus* of S. Muller.

The genus *Babirusa* of F. Cuvier takes its name from two Malay words, Babi, hog, and Rusa, a deer. It is the *Sus babirusa* of Linnaeus, and the *B. alfurus* of Lesson, and occurs in the island of Buru or Bourou, one of the Moluccas, also in Celebes and Ternate.

Sus Papuensis is a New Guinea hog.

Porcula sylvania, Hodg., the pigmy hog of the sal forests of N. India, is the Sano banel and Chota sur of the natives of India, and confines itself to the deep recesses of primeval forest. The adult males abide constantly with the herd, and are its habitual and resolute defenders.—*Sykes' Cat. Dec. Mam.* p. 11; *Crawford, Dict.* p. 152; *Tennant's Ceylon*, p. 59; *Catalogue of Mammalia in the India House Museum*.

HOG-DEER.

<i>Hyelaphus porcinus</i> , Sund.	<i>Axis niger</i> , B. Ham.
<i>Cervus porcinus</i> , Zimmerm.	<i>Cervus niger</i> , B. Ham.
<i>O. dodur</i> , Royle.	<i>O. oryzeus</i> , Kelaart.
<i>Axis porcinus</i> , Jerd.	

Para,	HIND.	Sugoria,	HIND.
Khar, Laguna,	"	Nuthrin baran,	"

The hog-deer inhabits Central India, Bengal, the Gangetic valley, Panjab, Sind, Assam, Sylhet, Burma. It frequents chiefly long grass and tamarisk jungles, grassy grounds and open glades in forest openings, rarely seeking the forest shade.

It is not gregarious, both sexes living solitary in general. The young are beautifully spotted. The buck drops his horns in April, and ruts in September.—*Jerdon*, p. 263.

HOGENDORP. Le Compte C. S. W. de Hogendorp, author of *Coup d'Œil sur l'île de Java et les autres possessions Néerlandaises dans l'Archipel des Indes*, 1830.

HOGG, SIR JAMES WEIR, BART., took a prominent part in discussions relating to Indian affairs in Parliament. He was a Director of the East India Company, and twice was Chairman. He was born at Stoneyford, in the county Antrim, in 1790, and was called to the bar in Ireland. At Calcutta he held the office of Administrator-General. He returned to England in June 1833. At the abolition of the old Court of Directors he was named one of the Political Military Committee. He was raised to the baronetcy in 1846.

HOG-GUM, a resin abundantly afforded by *Moronebæa coccinea*, Aubl., a fine tree of Jamaica. Negroes dig it from among the roots of old trees. It is used in medicine, and is inflammable, burning with an agreeable odour. This might be introduced into India. The false hog-gum of Jamaica is yielded by *Rhus metopium*, Linn.

HOGLA. BENG. *Typha angustifolia*, *Typha elephantina*, Roxb., elephant grass, cat's-tail grass.

HOG'S LARD.

Sur-ki-charbi, HIND. Adeps suillus, LAT.

This is the fat about the loins of the hog, *Sus scrofa*. It is purified by melting and straining. Its melting point is from 78 to 88 degrees Fahr. In Europe, hog's lard is much employed in ointments, but in India it is desirable to exclude it from all pharmaceutical preparations.—*O'Sh.*

HOISALA BELLALA, a dynasty who had supreme sway in Mysore from A.D. 1000 to 1300. They built three groups of temples, one at Somnathpur, S. of Mysore, by Vinadiya Bellala (1043), another at Bailur by Vishnu Verddhana (1114), and the greatest at Dwara Samudra or Hullabid (1145) by Vijaya Narsinha, the building of which was stopped by the Mahomedan invasion in A.D. 1310-1311.

Some of the Hoisala Bellala kings were Jains; but their buildings at Somnathpur, Bellur, or Hullabid belong to the Vaishnavā or Saiva faiths. The Basti temples of the southern Jains, like the Jaina temples of Northern India, always have a tirthankara as the object of worship. The Bettu temples of Southern India are open courtyards, containing images of Gomati, who possibly may be Gautama Buddha. There are two hills at the village of Sravana Belgola, 33 miles N. by W. from Seringapatam. On one of these, a mass of syenite 500 feet high, a Jaina image, 70 feet 3 inches high, has been carved out of the solid rock. The expression of its features is pleasing, with curly hair; and at Karkala, the image, 41 feet 6 inches, and weight 80 tons, has been moved to its present site, and was erected A.D. 1432. The third, and supposed oldest, at Yannur, is 35 feet high. They belong to the Digambara sect of the Jains, being entirely naked, but with twigs of the Bo Tree twisted round their legs and arms, with serpents at their feet. In the Jaina cave at Badami, the figure has two snakes twisted around its legs and arms, and the Bo Tree is placed behind. On a shoulder of the other hill at Sravana Belgola, called Chandragiri, are the Basti temples, fifteen

in number, all of the Dravidian style, raised into storeys. The Jaina temple at Moodbidri, and all others in Canara, resemble the temples of Nepal, and many of them are built of wood. The interiors are richly and variedly carved, with massive pillars. A large number of the tombs of the priests, some of them five to seven storeys in height, each with a sloping roof, like the temples of Khatmandu, Tibet, and China. The stambhas or free-standing pillars of the Jainas in Canara, are very graceful.—*Fergusson*, p. 393. See Architecture.

HOLAR, also Holiar or Holaru, in the Canar-ese districts of the Peninsula, the Pariah or Dher race. Professor Wilson describes the Holar as a man of a low or out-caste tribe, by profession a musician, which answers to the Mhang race, but there is no doubt but that the Holar is the Dher. The Morassi Holiyar are the same as the Halle Makkalu, old adopted sons of the Morasi Wakaliga. They are labourers and weavers. See Holiyar.

HOLARRHIENA ANTIDYSENTERICA. Wall.

Echites antid., <i>Roxb.</i>	Chonemorpha antid., <i>Don.</i>
Kogar of . . . CHENAB.	Keor (seed) . . . PANJ.
Kyur of . . . KANGRA.	Kawar of . . . RAVI, BEAS.
Kura (seed) of . . . PANJ.	Istaraku pala, . . . TEL.
Indurjao „ . . . „	

A large shrub or small tree of Malabar, Siwalik Hills, up to the Chenab in the N.W. Himalaya, Sylhet, and Chittagong. It bears a white flower. Its bark (Tellicherry bark) is used in medicine as an astringent. The leaves are used as fodder or as litter. The wood is white, light, and close-grained, and is used by carvers.

HOLARRHIENA CODAGA. IV. I. Kooda palli maran, TAM. A small-sized white wood, very fine grained, employed in cabinet-making. Dr. Wight gives also H. Malaccensis in *Icones*, 1298.

HOLARRHIENA MITIS. R. Br. Kirri-walla-gass, SINGH. A moderate-sized tree of Ceylon, not uncommon up to an elevation of 1500 feet.

HOLARRHIENA PUBESCENS. O'Sh. Reora, HIND. Wood light. This species and the H. antidysenterica yield the Indurjao talkh of the bazar.—O'Sh.; *Roxb.*; *Voigt*; *Thw. Zeyl.* p. 194.

HOLDNA. HIND. In Kangra, the process of destroying weeds in a rice crop.

HOLI, a popular Hindu festival, called in Sanskrit Holikha, or Phal gotsava, or Hutashan, or Hutasavi, also Dola or Dolavatra, or the Swinging Festival. It is supposed to relate to the vernal equinox, and to be similar to the Persian New Year's day. It is held about the 19th March, or ten days before the full moon of Phalgun. It is in honour of Krishna, and is quite a saturnalia, red powders being thrown and red fluids squirted at passers-by, and licentious songs sung. At the close of the festival, a pile is lighted, and a wheat cake or Poli offered on it. The analogy between the goddess of the spring, Saturnalia, Phalguni, and the Phagesia of the Greeks, will be recognised. The word is not derived from eating, with the Rajput votaries of Holica as with those of the Dionysia of the Greeks, but from Phalguni, compounded of Guna, quality, virtue, or characteristic, and Phala, fruit,—in short, the fructifier. The Egyptian Phallica is the Holica of the Hindus. Phula and Phala, flower and fruit, are the roots of all Floralia and Phalaria,—the phallus of Osiris, the thyrsus of Bacchus, or lingam of Iswara, symbolized by the Sriphala, or Ananas, the food of the gods, or the Sitaphala of Sita, the Helen of

Ayodhia. It is much observed by the cowherd castes of Orissa.

HOLIDAYS of the several races dwelling in India chiefly occur at seasonal changes, but also at the anniversaries of certain occurrences connected with their religions or historical events. The dates of the public holidays vary with the lunar months, and those below are approximate:—

Christian.

New Year's day, Jan. 1.	Easter holidays, March.
Good Friday, April.	Ascension day, May.
Christmas day, Dec. 25.	Pentecost holidays, June.

Hindu.

Makar Sankranti, about January 11.	Janm Ashtami, about Aug. 14.
Maha Shivaratri, about February 24.	Ganesh Chaturthi, about August 25.
Huli, about March 10-11.	Dasara, about September 30.
Ram Naomi, about April 4.	Diwali, about Oct. 18-19.
Shravani purnima, Cocca-nut day, about August 6.	

Parsee—Rasami or Shahanshahi.

Jamshidi navroz, about March 21.	Gatha Gahanbars, about September 19-21.
Aban feast, about end of April.	Pateti or New Year's day, about September 23.
Adar feast, about June 8.	Kurdad feast and valava, about September 28-29.
Farvardin Jasan, about June 8.	Atishbehram Salgeri, about November 8.

Parsee—Kadmi.

Aban feast, about end of March.	Pateti or New Year's day, about September 24.
Farvardin Jasan, about May.	Kurdad feast and valava, about August 29-30.
Gatha Gahanbars, about August 20-22.	Atishbehram Salgeri, about September 9.

Mahomedan—Sun'i (lunar months).

Shah-i-Burat.	Ashura.
Lailat-ul-Kadar.	Bari Wafat.
Ramadhan 'Id.	Ghilan.
Bakr 'Id, or 'Id Kurban.	Miraj-i-Mahomed.

Mahomedan—Shi'ah (lunar months).

Katl-i-Imam Ali.	'Id Gadir.
Shaha Kadir.	Ashura.
Ramadhan 'Id.	Chahlam.
Bakr 'Id.	'Id Maolud.

Jewish.

Purim, or day of Queen Esther, March 13.
Pesach or Passover, April 11-17.
Shabuoth, or the Delivery of the Law, May 31.
Tishabaib, or the day of Lamentation, August 1.
Rosh Hosana, or New Year's day, September 21-22.
Kipur, or the days of Atonement, September 29-30.
Succoth, or the Feast of Tabernacles, October 5-13.

Hindus have many other festivals. Their names differ in the several languages; but there may be named here Bali-Pratipada, Basant'h-Panchami, Nag-Panchami, Kartiki Ekadasi, and others.

Mahomedans have also the Maharram, Akhiri-Char Shamba, Chiraghan-i-Banda Nawaz, and Zinda Shah Madar, Pir Dastagir, and Urus-i-Kadar Wali.

Parsees have in addition, the Amardad, Jamshidi-Naoroz, Ardibehsht-Jasan, Meher-Jasan, and others.

HOLIGARNA LONGIFOLIA. Roxb.

Kagira, Biba-biba, CAN.	Katu-jeru, . . . MALEAL.
Holgeri, . . . MAHR.	

One of the trees yielding the well-known black lacquer varnish. It grows in Travancore, in Malabar, in Canara, and Sunda, mostly above the ghats at Nilgund, in the Konkan, Assam, Chittagong, and in the forests of Tenasserim. Wood good for houses and beams. Its danger-

ously acrid exudation is used by the natives to varnish shields and for other purposes. A fine black varnish from its fruit is brought from Manipur. This turns of a beautiful black colour when applied to a surface, owing, according to Sir D. Brewster, to the fresh varnish consisting of a congeries of minute organized particles, which disperse the rays of light in all directions; the organic structure is destroyed when the varnish dries, and the rays of light are consequently transmitted. There is brought also from Manipur a varnish made from the *Semecarpus anacardium* (marking nut), and a remarkable black pigment resembling that from *Melanorrhœa usitatissima*, which is white when fresh, and requires to be kept under water.—*Rozb.*; *Voigt*; *Gibson*; *O'Sh.*; *Mason*; *Hooker's H. J.* ii. p. 331; *Beddome*.

HOLIGARNA RACEMOSA. *Rozb.* A tree of Assam, Sylhet. Leaves alternate, linear-oblong. Flowers racemed, juice of the wood acrid.—*Rozb.*

HOLIYA or **Holayar**, in the Canarese-speaking country, in Mysore, and in Coorg, an agricultural labourer. In the Canarese-speaking country, like the Pariah or Dher; in Coorg he is one of three principal classes of slaves, Holayaru, Yewaru, and Paleru. Their subdivisions are the Mari, Byr, Murtha, Bulgi, Baday, Rookh, and Kembatta Holayaru. The last is a native of Coorg. The Mari Holayaru follow the custom of descent through the female line, the descensus ab utero. The Holeyaru race of labourers in Coorg, ill-favoured, with coarse, stupid features, short in stature, but strong built, with dark and black skin, and black, straight hair. They practise demonology, and are said to have no guru.—*Wils.* See **Holar**.

HOLKAR, the family name of the Mahratta rulers at Indore and its territories. The family name is taken from the village of Hull, on the Nira river in the Dekhan, where they were shepherds and farmers. Mulhar Rao Holkar, son of Khundaji Holkar, was born about the year 1693, and his mother, in consequence of some dispute, took him to Kandesh to his uncle Narainji, where, as a lad, he herded his uncle's sheep. When grown up he took service, and distinguished himself under Kudum Bande, a Mahratta leader, but subsequently (1724) under Bajji Rao Peshwa as a commander of 500; and in 1728 was sent to administer Malwa, where he died A.D. 1769. Mulhar Rao was present at the battle of Panipat, and shared in the common overthrow of the Mahratta armies. Sindia's forces were almost annihilated, and Madhaji Sindia was lamed for life; but Holkar's division alone drew off with serried ranks and little loss, and Sindia thought that he had not been well supported by Holkar. He was succeeded by his grandson, Mali Rao, who died insane, nine months after his ascension. The pious Ahalya Bai, the mother of Mali Rao, then took the management of affairs, and appointed as the commander of the army, Tukaji Rao Holkar, a chief of the same tribe, but in no way related to Mulhar Rao. This chief for many years served Ahalya Bai with the most devoted fidelity. Ahalya Bai died in 1795, and was not long survived by Tukaji Rao Holkar, after whose death the power of the house of Holkar was nearly extinguished by quarrels in the family and amid the dissensions which distracted the Mahratta confederacy at the close of the eighteenth century. The fortunes of the family, however, were restored by Jeswunt

Rao, an illegitimate son of Tukaji Rao Holkar, who in 1802 defeated the united forces of Sindia and the Peshwa near Poona. The conclusion of the treaty of Bassein, between the Peshwa and the British Government, defeated Jeswunt Rao's hopes of possessing himself of the person of the Peshwa. In the following year, when Sindia and the raja of Berar combined against the British, Jeswunt Rao Holkar promised to join the confederacy, but on the actual outbreak of hostilities he kept aloof, and apparently intended to take advantage of the war to aggrandize himself at Sindia's expense. His schemes, however, were rendered hopeless by the treaty of Surji Anjengau; and Jeswunt Rao Holkar, after making a series of inadmissible proposals for an alliance, seems then to have hastily determined, unaided and alone, to provoke hostilities with the British. In the war which followed, Holkar was completely overthrown. He was pursued by Lord Lake across the Sutlej, whither he retired in the hopes of forming a combination with the Sikhs against the British Government; and on 24th December 1805 he signed a treaty on the banks of the Beas, by which he was stripped of a large portion of his territories. Soon after the conclusion of the treaty, Jeswunt Rao Holkar became in 1805 insane. He died in 1811, leaving an illegitimate son, named Mulhar Rao Holkar, during whose minority the state was torn by the most violent dissensions. The lad's mother, Toolsi Bai, the favourite concubine of the late ruler, secured herself in the regency. She was, however, subsequently barbarously murdered, and Holkar's army having sustained a complete defeat at Mehidpore, on 6th January 1818 the treaty of Mundisore was concluded, by which the supremacy over the Rajput princes of Udaipur, Jeypore, etc., was transferred to the British Government, the engagement between the British Government and Amir Khan was confirmed, four districts rented by Zalim Singh of Kotah were ceded to him, Holkar lost all his possessions within and to the south of the Satpura Hills, and his remaining territories came under the protection of the British Government. Mulhar Rao Holkar died in October 1833, at the age of 28. He left no issue, but his widow and his mother adopted Martand Rao Holkar, a child between three and four years of age, who was said to be of the same tribe and lineage as Mulhar Rao Holkar. The child was publicly installed on 17th January 1834, under the name of Martand Rao Holkar. The adoption of Martand Rao, however, proved to be a device of the mother of Mulhar Rao Holkar, for the purpose of keeping the power in her own hands during a long minority. It was not acceptable to the people, who were in favour of the succession of Hari Rao Holkar, a cousin of the late Maharaja. Hari Rao since 1819 had been kept in rigorous confinement, but he was released on the night of 2d February 1834, by a powerful body of his partisans, and received a ready welcome from the troops and people. The policy of non-interference prevented the Resident from giving active support to Martand Rao, although the installation of Martand Rao had been formally acknowledged by the British Government. This indifference on the part of the British Government as to who should rule, gave rise to most serious disturbances. The wealthy merchants fled from Indore, trade

was suspended, and Bhil tribes infested the roads and destroyed many villages. Martand Rao was banished from the country, and granted an allowance of 500 rupees a-month, on condition of his resigning all claims to the succession. On 8th September 1835, an attack was made on the palace for the purpose of assassinating the Maharaja and his minister. The attempt was unsuccessful, and resulted in the slaughter of the whole of the assailants. Martand Rao Holkar died without issue at Poona, on 2d June 1849, and with his death ended the intrigues which from time to time endangered the peace of the country, both during the rule of Hari Rao Holkar and his successor. When the attack was made on his person in 1835, Hari Rao applied to the British Government for aid, but it was refused, on the ground that the engagement to maintain the internal tranquillity of the country depended on the condition that the measures of its government were not directly or indirectly the cause of disturbance; and because the grant of assistance would require a continual interference in the internal affairs of the state, inconsistent with the position of Holkar and the policy of the British Government.

In 1841, Maharaja Hari Rao adopted as his heir and successor, Khundi Rao, a boy of 13 years of age, son of an obscure zamindar, and very distantly related to the reigning family; and Hari Rao died on the 24th October 1843, aged 48. Warned by the evils which resulted from the vacillating policy pursued on the accession of Martand Rao, the British Government took immediate measures to proclaim Khundi Rao as the acknowledged successor, and to make it known that no other claims would be recognised. But Khundi Rao died on 17th February in the following year. He was never married. On this, Sir Robert Hamilton selected and installed the younger son of Bhao Holkar, who took the title of Tukaji Rao Holkar. In a letter to the young chief, the Governor-General laid down the conditions on which the state was conferred on him. This letter (No. lxxvii.) was declared to have the force of a sunnud, and the Maharaja was required to present a nuzzer of 101 gold mohurs on its delivery.

The young chief, Tukaji Rao Holkar, attained his majority in 1852, and was entrusted with the entire management of the affairs of the state, and was granted a sunnud guaranteeing to him the right of adoption.

An annual payment of 30,000 rupees is made to Holkar by the British Government as compensation for his share of the district of Patan, which was made over to Bundi in 1818. The Maharaja also receives through the British Government a tribute of 72,700 Salim Sahi rupees, on account of Partabgurh, but he has no feudal supremacy over that state. He receives credit for this tribute as part of his contribution towards the Malwa contingent, and it is realized from Partabgurh one year in arrears.

In the war with Jeswant Rao Holkar, Lord Lake gave many lessons how to deal with the less coherent forces of Asiatic rulers. Jeswant Rao Holkar, when he opposed the British in 1803, had 100,000 regular troops, amongst whom were 60,000 light horse, and 180 guns, with the fortresses of Chandore and Galingurh. From the tactics he adopted, this moveable force baffled the

British commanders and all the military power of India, from April 1804 till the 15th February 1805. But on the 2d April 1805, Lord Lake marched all night, and at daybreak entered Holkar's camp, which he completely broke up; in this, in going and coming, Lord Lake marched 50 miles. Lord Lake subsequently, in December 1805, marched in his pursuit 405 miles in 43 days, from Secundra to the Beas river at the Rajghat. In Jeswant Rao Holkar's final overthrow, Lord Lake marched 350 miles in a fortnight. Sir D. Ochterlony was defending Dehli against the Mahrattas; but, on their abandonment of Dehli on the 14th or 15th October 1803, Lord Lake followed them, and at length, with a small body of 3000 British horse and artillery, amongst which were the 8th and 27th Dragoons, made a forced march of about 48 miles, defeated the forces of the Mahrattas, about 60,000, near Farrakhabad, followed 10 miles in pursuit, and returned to camp, making a journey of about 70 miles in 24 hours, with a loss of 22 dragoons killed, and 20 Europeans and natives wounded.

At that time, Amir Khan, the Rohilla chieftain of Rohilkhand, forsook the Bhurtpur raja, but was followed by General Smith, whom Lord Lake sent in pursuit. After a march of 700 miles in 43 days, Amir Khan's army was overtaken, and defeated at Afzalghur, at the foot of the Himalayas, on the 2d March 1804, and Amir Khan was conveyed across the Ganges and Jumna in March, but he rejoined Holkar's camp under Bhurtpur. At Laswari, in Central India, in 1803, Lord Lake and General Fraser fought and won a battle against the battalions of Sindia and Perron.

The Indore State maintains 3300 cavalry, 5250 infantry, and 340 artillery, with 24 field guns.

In 1832, the Maharaja (1883) Tukaji Rao Holkar was born, and in 1843 he was placed on the throne by the intervention of the British. He has displayed much capacity as a ruler. His estates are somewhat scattered, and he has wished to connect them. Area, 8075 square miles, and population in 1878 was 635,000. He has earnestly encouraged all commercial and trading transactions. The aboriginal race is the Bhil.—*Treaties and Sunnuds.*

HOLLAND, a country in Europe with great possessions in the Eastern Archipelago, which are designated Netherland India, also the Dutch Possessions in India; and Holland formerly held parts of Ceylon, also parts of what is now British India, and likewise Malacca in the Malay Peninsula. Holland is situated along the south-eastern coast of the North Sea, and extends in its greatest length, from N.E. to S.W., about 190 English miles. Its greatest breadth, from E. to W., is about 123 English miles. The superficial area is 7,614,252 English acres, or 11,897 English square miles. Holland has had a severe contest with the ocean, which has ended in the country being brought into a high state of cultivation and comparative safety. The canals are very numerous, and of the greatest utility in draining off the waters, and in facilitating the internal trade. They are lined with trees, which tend greatly to improve the country, in itself so flat, that to those approaching it along the rivers and some part of the coast the trees and spires seem to rise out of the water. Along the coast of the North Sea there is a line of broad sand-hills and downs, in some parts so very high as to

shut out the view of the sea even from the tops of the spires. In some parts of Zealand and of North Holland the defensive war against the encroachments of the sea is kept up with great difficulty and at an immense expense. The province of Friesland, which has no sandhills, is protected against the sea by stupendous dykes and palisades, the repair of which costs upwards of half a million sterling yearly. The industry of the people has multiplied cattle and pasture-grounds. Laws passed in 1857 and 1863, and based on a system of religious equality, and a total separation of church and state, ensure for every child in the country an education in the simple branches of secular knowledge. The three universities of Leyden, Utrecht, and Groningen contain upwards of 1400 students. The population in 1865 was 3,529,108. Protestants, 1,942,387; Catholics, 1,234,486; the remainder are Jews. Several dialects are spoken in Holland. The Dutch, which is an offspring of the Low German or Nieder Deutsch, is the language of two-thirds of the inhabitants. Flemish is spoken on the Belgian frontier. See Dutch.

HOLLY, *Ilex aquifolium*, *Linn.*, a favourite European evergreen. Its hard white wood is used in making Tunbridge ware, for the stringing or lines in cabinet work, calico-printers' blocks, etc. Birdlime is the juice of holly bark extracted by boiling, mixed with a third part of nut-oil. 21 species are known as natives of the Himalayas, Nepal, Southern India, Khasia Hills, and Burma. Several species of holly—*Kau-kuh* and *Tsz'-shu*—grow in China; *Ilex cornutum*, near Ningpo; *I. agnifolium*, near Canton. The berried holly tree, called *Miau rh-tze* and *Luh koh-tze*, grows along the valley of the Yang-tse; a tea, called *Luh koh-ch'a*, is made from the leaves, and the wax insect sometimes feeds on them. The wood is turned into small boxes, and the bark is boiled to produce birdlime.—*Smith, M. M.* See *Ilex*.

HOLLYHOCK is a plant of the genus *Althæa*, and its varieties well worth cultivating on the plains during the cold months of India.—*Jaffrey*.

HOLOCANTHUS INSERATOR, *C. and V.*, *Kulloo koli min*, *TAM.*, is a fish frequently taken at Madras. *H. semicircularis*, *C. and V.*, also a Madras fish.

HOLOCENTRUS ARGENTEUS is the *Poorowah*, a very delicious fish of Ceylon and the Bay of Bengal. *H. ruber*, a beautiful red fish of the New Hebrides, is poisonous at certain seasons.—*Bennett*.

HOLONG. *HIND.*? A tree of Chutia Nagpur, furnishing a hard red timber.—*Cal. Cat.*

HOLOSTEMMA RHEEDIANUM. *Spr.*

Holostemma adakodion, *R. et Sc.*
Asclepias annularia, *Kozb.*
A. convolvulacea, *Herb., Heyne.*
Sarcostemma annulare, *Roth.*

Apoong, . . .	KOL.	Istara'kula palem,	TEL.
Ada modien, . . .	MALEAL.	Vistara'kula pala,	„
Palla-gurgi, . . .	TEL.	Palagurugu,	„

This plant grows throughout India. It has large flowers of a red, green, and white colour; is very abundant in the hills about Purulea, and is also found in the neighbouring plains of Chutia Nagpur. The fibre is said to attain its best condition after the rains.—*Royle, Fib. Pl. p. 306.*

HOLOTHURIA.

Hoy-shun, . . .	CHIN.	Swala, . . .	JAPAN.
Sea cucumber, . .	ENG.	Holothurion, . .	IAT.
Sea slug, . . .	„	Trepang, MALAY, JAPAN.	
Cornechu, . . .	FR.	Biche-la-mar, . .	SP.
Beche-de-mer, . .	„		

There are thirty-three species or varieties, and several of them are used as food. They are found in the Mediterranean, in the Eastern Archipelago, Australia, Mauritius, Ceylon, Zanzibar, etc., and are occasionally brought to Bombay from the latter place, and re-exported to China. The great sea cucumber of Europe is the largest of all the known species, and is probably a foot in diameter.

H. oceanica, *Lesson*, is about 40 inches long, and secretes from the surface of its body a fluid which causes an intolerable itching.

H. lutea, *Quoy and Gaimard*, is the *Stychopus luteus*, *Brandt*.

H. tubulosa, *Blainville*, of the Mediterranean. The *Pieraster Fontanesii*, a parasite fish, dwells within it. It is eaten at Naples.

In the Ladrões, *H. Guamensis*, *Quoy and Gaimard*, is preferred as food.

H. edulis, the trepang of the Malay, is black. It is found in all the islands from New Holland to Sumatra, and also on most of those in the Pacific; but is produced in the greatest abundance on small coral islands, especially those to the south of the Sulu group. The Chinese at Canton call it *Hoy-shun*, which means sea ginseng.

The holothuria of Raffles Bay is about 6 inches long and 2 inches thick. There are six sorts, the best lying about 12 feet deep. It is an unseemly-looking mollusc. Upwards of 8000 cwt. are yearly sent to China from Macassar; about 9000 cwt. are exported from Java. It is fished for in April and May, and is relished in China and in Malay countries. They are boiled in water, then flattened by stones, dried on mats in the sun, and then smoked. It is for the most part caught by the hand, for it has little power of locomotion; but in deep water, sometimes by diving or by harpoons. It sells at Singapore at 8 to 115 dollars per pikul of 133½ lbs. Trepang, although an article of considerable importance in the trade of the Indian islands, is seldom dealt in by Europeans, which arises from nice or rather capricious distinctions in their quality, which no European is competent to appreciate.

New Caledonia exports annually, to the value of £4000, the white bellied, red bellied, small black, large black, and brown, with teats, selling at £12, £15, £20, £25, and £30 the ton. In China the first quality sells at £90 to £200 the ton. In 1871, 2742 pikuls were received at six Chinese ports. *H. scabra*, of the Philippine Islands, regularly lodges in its interior, species of *fierasfer* and of *pinnotheres*.

Many of the Holothuridæ have anchor-shaped spicules embedded in their skin, as the *Synapta*; while others (*Cuviera squamata*) are covered with a hard calcareous pavement. Many of these are of a bright red or purple colour, and are very conspicuous; while the trepang which is not armed with any such defensive weapons, is of a dull sand or mud colour, so as hardly to be distinguished from the sea-bed on which it reposes. See *Fierasfer*.

HOLU. CAN. Pollution. See *Holar*; *Holaya*.
HOLWAN. In A.H. 16, when the Arabs had

taken this city, 300 horsemen returning from this enterprise, under the command of Fadhilah, towards the end of the day encamped between two mountains in Syria. Fadhilah (Fazl Allah) having intimated that it was time for evening prayer, began to repeat with a loud voice the usual form, 'God is great,' etc., when he heard his words repeated by another voice, which continued to follow him to the end of his prayer.—*Rich's Kurdistan*, i. 51.

HOLWELL, Mr., the chief of the settlement of Calcutta, when, on the 18th June 1756, it was taken by Suraj-ud-Dowla. Mr. Holwell and 146 of his people were thrust into a guard-room 20 feet square, from which in the morning only 23 re-issued alive. This guard-room was known in Indian history as the Black Hole of Calcutta. It was in the corner of Tank Square, near where, in 1834, was Messrs. Lyell, Mackintosh, & Co.'s office, but it was removed about the beginning of this century. See Black Hole; Calcutta.

HOLY FIG - TREE, *Urostigma religiosum*, *Mig.* Holy Grail or Sangreal, see Jataka. Holy Star Anise, *Illicium anisatum*.

HOM, of the Zendavesta, is the Soma of the Vedas, and supposed to be the *Sarcostemma brevistigma*; but possibly is the vine of Bacchus, the ampelos, and identical with the Gaogird tree, which enlightened the eyes.

HOMA, a sacrificial burnt-offering of the Hindus. It consists of clarified butter or ghi, presented to the fire in sacrificial ladles. The word is Sanskrit from Hoo, to offer. The devout of all eastern races have offered to the deity articles of the foods by which life is sustained. The Hom or burnt-offering of Abel was of the first of the flock. The modern Rajput tenders the first portion of the repast to Anadeva, the nourisher, the goddess of food; and all Hindus make similar oblations. The Homa burnt-offering can be made only by Brahmans. While prayers (mantra) are being said, five kinds of consecrated wood, together with the dhubra grass, rice, and butter, are kindled and burnt, and the fire is fed so long as the ceremony lasts.

HOMAGE is shown in Rajputana by offering of water. The kallas is a household utensil of brass. A female of each family, filling one of these with water, repairs to the house of the head of the village, when, being all convened, they proceed in a body to meet the person to whom they render honour, singing the subailea, or song of joy. The presenting of water as a token of homage and regard is especially common in Mewar.—*Tod's Rajasthan*, ii. p. 98.

HOMALIUM CEYLANICUM. *Gardn.*

Blackwellia Ceylanica, *Gardn.*; *B. tetrandra*, *W. Ic.*

This large tree, the Lee-yang of the Singhalese, is not uncommon throughout the western forests of the Peninsula up to 4000 feet; is also found on the N. Arcot Hills, near Madras, also in Ceylon. The timber is very strong, and in use for building and various other purposes.

Homalium tomentosum? Myouk-kyan of the Burmese, a tree of Moulmein, with a strong wood. *H. Travancoricum*, *Bedd.*, is a very handsome middle-sized tree of Travancore and Tinnevely. *H. Griffithianum*, *minutifolium*, *Nepalense*, *propinquum*, and *Schlichii* are also known, large trees.—*Cat. Cat. Ex.*, 1862; *Beddome, Fl. Sylr.*

HOMALONEMA AROMATICUM. *Schott.*

Calla aromatica, *Roxb.* | *Zantedeschia arom.*, *Spr.*
Kuchu gundubi, *BENG.*

A perennial plant, native of Chittagong; tubers covered with the dried sheaths of the leaves, with long white fibres proceeding from every part. When cut they exhale an aromatic scent like ginger. As a stimulant it is highly esteemed in India. Dr. Wight figures also *H. calyptratum* and *H. rubescens*.—*Roxb.* iii. 513; *W. Ic.*; *O'Sh.*

HOMALOPSIDÆ, a family of harmless freshwater snakes, order Ophidia, sub-order Serpentes colubrinæ nonvenenati, species as under:—

Fordonia unicolor, *Gray*, Penang.
Cantoria elongata, *Gthr.*, Singapore.
Cerberus rhynchope, *Schneid.*, from Ceylon to Siam.
Hypsihrina plumbea, *Boie*, Eastern India.
H. enhydria, *Schneid.*, Bengal, Eastern India.
H. Jagerii, *Peters*, Siam.
H. Bennettii, *Gray*, China.
H. Chinensis, *Gray*, China.
Ferania Sieboldii, *Schleg.*, Bengal, Province Wellesley.
Homalopsis buccata, *L.*, Malayan Peninsula, Gamboja.
Hipistes hydrinus, *Cant.*, Penang.
Herpeton tentaculatum, *Lacép.*, Siam.

HOMARARI, a Baluch tribe who occupy Tanbu. See Kalat.

HOMERITÆ of Ptolemy; the Himyar of Arabia.

HOMONOYA SYMPHYLLIFOLIA. *Kurz.*
A timber tree of Darjiling Terni.

HOMOPTERA, an order of insects. Amongst them, in the East Indies, see Trimeria; family Fulgoridæ:—

Fulgura (Hotina) clavata, *Westw.*, Assam.
F. gemmata, *Westw.*, Himalaya.
F. guttulata, *Westw.*, N. India.
F. virescens, *Westw.*, Sylhet.
F. viridirostris, *Westw.*, Assam.
F. spinolæ, *Westw.*, Mysore, Assam.
F. oculata, *Westw.*, Malabar, Penang.
Aphæna scutellaris, *White*, Java.
A. imperialis, *White*, Sylhet.
Ancyra appendiculata, *White*, Moulmein.

HONAIN-bin-ISHAQ, a Christian, a native of Hira, who lived in the 9th century. He was one of the most ancient of the Arabian medical writers. After travelling in Greece and Persia, he settled in Baghdad, where he translated into Arabic the elements of Euclid, the Almagest of Ptolemy, and the works of Hippocrates and Aristotle. He appears to have commented on the works of Galen. One of his treatises is on the eyes, and another on sleep and vision.

HO-NAN is bounded on the N. by Peh-chi-li, on the S. by Hu-peh, on the E. by Ngan-hoei, and on the W. by Shen-si; it is also called by the Chinese, Tong-hoa. The capital is situated on the south bank of the Hoang-ho, which flows through the whole breadth of the province. Its population is turbulent, and generally found inimical to foreign travellers. Ho-nan means south of the river.—*Sirr's Chinese*, i. p. 431.

HONAWAR, a seaport town in the N. Canara district of the Bombay Presidency; situated in lat. 14° 16' 30" N., and long. 74° 29' E. On the decay of the Portuguese power in India, Honawar was acquired by the sovereigns of Bednor; and, on the conquest of Bednor by Hyder Ali, this town also submitted to him. In 1783 it was taken by assault by a British force, despatched from Bombay, under the command of General Matthews; and in 1784 successfully defended by

Captain Torriano against Tipu Sultan, to whom, however, in the same year, it was ceded by the treaty of Mangalore. On the overthrow of that prince in 1799, it again came into the possession of the British. It is the Honor and Onor of Deb and Cesar Frederici; Hinawar, Hannaur of Abulfada; Hanor and Hunawur of Abd-ur-Razzaq; and probably the Nandor of the Catatan map; Abul Fazl describes it as a fine place, with pleasant gardens and a Mahomedan population, with a great export trade of rice, and much frequented by shipping. It was long a nest of pirates.—*Imp. Gaz.; Cathay*, ii. p. 451.

HONEY, a stone used for sharpening or setting cutlery. The best is of a greenish colour, inclining to yellow, often marked with thin dendrical lines, and is moderately hard, having a fine close texture, resembling indurated clay. Hones of good quality are obtainable in the Cuddapah and Kurnool districts of India.—*Waterston; M. Ex.*

HONEY.

Asal-ul-nahl, Injubin, Ar.	Mel, LAT.
Pya-ya, BURM.	Madu, Ayer-maddu
Fung-mih, CHIN.	manisan labah, MALAY.
Honig, Honing, DUT.	Shahad, PERS., HIND.
Diba, Asal, EGYPT.	Med, RUS.
Miel, FR., SP.	Madha, SANSK.
Debash, HEB.	Mipanny, SINGH.
Madh, HIND.	Haning, SW.
Mele, Miele, IT.	Tayn, Teyna, TAM., TEL.

Honey is obtained from the honeycomb of the *Apis mellifica*, Linn., and other species of honey-bee, of the order Hymenoptera, Linn. Honey is secreted by the nectaries of flowers, sucked by the bee into its crop, where it undergoes some slight changes, and is then stored up in the comb for the food of its community. The finest honey is that which is allowed to drain from the comb; and if obtained from hives which have never swarmed, it is called virgin honey. In some localities it is poisonous, owing to the deleterious nature of the plants from which it is collected. Dr. Hooker has stated that in some parts of Sikkim the honey of *rhododendron* flowers is believed to be poisonous. *Azalea pontica*, the *Anabasis* informs us, poisoned the soldiers of Xenophon in the retreat of the ten thousand. Honey diluted with water undergoes the vinous fermentation, and hydromel or mead is produced. A wild shrub, *jeneda*, appears to intoxicate the bees. The aborigines take a piece in their hand, and, biting through the bark, they get the pungent white juice into their mouths; this they spit out at the bees, which either fly away or become intoxicated. The honey of the Eastern Archipelago is a thin syrup, very inferior in flavour to that of temperate climates. The comb is chiefly sought on account of the wax, which forms a large article of exportation to Europe, India, and China. The honeys of the Aravalli and of Kashmir are praised, selling at tenpence the pound. There are wild bees in the woods of Kashmir, but the zamindars have also hives in the walls of their houses. The bees are quite domesticated. In the Shevaroy Hills honey is largely collected by the Mallali race, and is seemingly the product of three species of bees. Mr. Fischer had some hives of bees from Europe, but by day the bee-eater birds and king-crows largely destroyed them, and moths at night stole the honey. Once, on examining the hive, he found a moth had succeeded in forcing its way into the hive. The bees had

killed it there, but as they could not cast it out, they enclosed it in a wax tomb.

The honey-yielding *Apis dorsata*, A. *bicolor*, A. *indica*, A. *nigripennis*, and A. *socialis*, occur in the south of India and Ceylon.

Sir Samuel Baker, in his book, *Eight Years in Ceylon*, refers to the *Bambera* (A. *dorsata*) as follows:—‘The largest and most extensive honey-maker is the *Bambera*. This is nearly as large as a hornet, and it forms its nest upon the bough of a tree, from which the comb hangs like a Cheshire cheese, being about the same thickness, but five or six inches greater in diameter. The honey from this bee is not so much esteemed as that from the smaller varieties, as the flavour partakes too strongly of the particular flower which the bee has frequented; thus in different seasons the honey varies in flavour, and is sometimes so highly aperient that it must be used with much caution. The wax of the comb is the purest and whitest of any kind produced in Ceylon.’ It is supposed to range the Archipelago, Siam. A. *dorsata* and A. *indica* have been introduced into Europe, and the Cyprian bee into Ceylon. In Europe, the gold-banded Ligurian is prized.

HONEY DEW, a secretion on plants, from species of Aphides.

HONEY-EATERS of the South Sea Islands, are species of *Melithreptes*, in Australia and neighbouring islands, of the family *Meliphagidae*.

HONEY-GUIDE, birds of the sub-family *Indicatorinae*, genus *Indicator*, of Sikkim and the Malayana.

HONEY OF RAISINS is the Sher of the Persians. It is the juice of the unripe grape, boiled to a syrup and formed into a solid mass, like congealed honey out of the comb. It is supposed to be this honey to which Ezekiel, writing of Tyre, alludes (xxvii. 17): ‘Judah and the land of Israel traded with thee; corn of Minnith, honey of raisins, and (in some editions honey alone) oil, and balm gave they to thee for thy wares.’ It is made in Syria, and is exported to Egypt.—*De Bode's Tr.* ii. p. 146.

HONEY-SUCKERS, the name of a family of birds, the *Nectarinidae* or *Cinnyridae*, of which several species are common to India and the Archipelago. They are also called the sun-birds, and they take the place in the E. Indies of the humming-birds of S. America. Humming-birds have straight bills, while the bill of the sun-bird is curved. The species are all of small size, with some feathers of a bright metallic lustre. They hover over flowers, and extract the honey with their tongues. Dr. Jerdon notices the *Arachnothera magna* and A. *pusilla*, the large and little spider-hunter, *Æthopyga miles*, *Æ. Vigorsii*, *Æ. Gouldiae*, *Æ. ignicauda*, *Æ. Nipalensis*, *Æ. Horsfieldii*, and *Æ. saturata*; *Leptocoma Zeylanica* and L. *minima*; *Arachneothra Asiatica* and A. *lotenia*. The sub-family *Dicaeinae*, flower-peckers, has *Dicaeum coccineum*, D. *chrysorhæum*, D. *minimum*, D. *concolor*, *Piprisoma agile*, *Myzanthus ignipectus*, *Pachyglottis melanocephala*. In the Moluccas, in Bouru and Ceram and Timor, and Australia, species occur of *Tropidorhynchus* and *Mimita*.—*Jerdon; Tennant*.

HONEY-SUCKLE. Jin-tung and Kin-yin-hwa, CHINESE, species of the genus *Caprifolium*, with few exceptions natives of cold countries; require rich vegetable soil.—*Jaffrey*.

HONG, a word used in Malay invocations, unhallowed, of great power, and so panas (hot), that if any man use a Hong invocation three times, nothing that he undertakes for himself will succeed, and he will live powerful but miserable, able to afflict or assist others, but unable to assist himself. It is perhaps the Sanskrit Hom. It appears to be considered as a recognition of an essence or first principle beyond God, and an appeal to it for power which God has not granted to man. It is used in Javanese invocations; and a Javanese explains it to mean embryo of being, primeval essence; so that Sir T. S. Raffles' conjecture, that it is the Buddhist and Hindu O'm (Aum), is probably correct.—*Jour. Ind. Arch.*

HONG. CHIN. A united firm, a mercantile corporation.

HONGAY. CAN.

Hip-pe, CAN. | Moha, . . . HIND., MAHR.
Kuranj, . . . HIND., MAHR. | Nella kalavatu, . . . TEL.

Under these names are known two different trees growing in the woods of Mysore. Oil is obtained from the seeds of both. Hip-pe trees are extensively planted in tops in front of villages, for the purpose of obtaining oil. They seem to be species of *Bassia*, or perhaps *Pongamia glabra*.—*M. Ex. of 1857.*

HONG-KONG, a large island at the entrance of the Canton river, about 22 miles in circumference, but very mountainous and generally barren. The highest peak has 1825 feet of elevation. The island was ceded to the British in the beginning of 1841, and Victoria Town is on the north side of the island. The houses of the European residents are built terrace-like, on the face of the hill. Hong-Kong is the Heang-Keang of the Chinese, and the name signifies the valley of fragrant waters. It is one of the group of islands which lie north of the estuary leading to Canton, in lat. 22° 17' N., and long. 114° 12' E., and is distant from Macao 42 miles, and from Canton 105 miles. Hong-Kong is about 10 miles in length, and 4½ in breadth; the noble harbour is nearly 4 miles in length, and rather more than 1½ in width. Hong-Kong is one of that cluster of islands called by the Portuguese the Ladrões, or piratical islands.—*Lay's Chinese as they are*, p. 280.

HONHAR. HIND. Fate; that which is to be.

HONIGBERGER, Dr., a German physician at the court of Ranjit Singh; author of a work on the medicinal products of the Panjab.

HONOVER, the most sacred prayer of the Parsees. It is very ancient, and has been translated from the Zend into German by Professor F. Spiegel, and into French by J. Oppert. D. Framjee of Bombay sent its words to the editor in 1871. He considers it to be a theistic prayer to the Supreme Being. Its words are,—

'Yathā ahū vairyo
Athā ratus asāt ohit hachā
Vartheus dasdā mananhō shynothēnanām
Ariheus Masdai, Kshathremoh Ahurū
Ayim darigubyō dadhat Vastārem.'

—*Bunsen's God in History.*

HOODED, in natural history, a term applied to describe several animals. The hooded chameleon is the *Chamaeleo cucullatus*; the *Corvus cornix* is the hooded crow of Europe, Asia Minor, Afghanistan, Japan, and Barbary; and the hooded presbytes is one of the *Simiade*.

HOOKAH. HIND. The Indian pipe and appar-

atus for smoking. In Bengal generally, and in Persia, pure tobacco is rarely smoked; but various compounds are made and smoked in hookahs of various forms, the ghalyun of Arabia, nargyle of Persia, hubble-bubble of British India generally, and the highly ornamental hookah. The nargyle is doubtless a word derived from Narel, a cocoanut, for the primitive form of hookah is the narel, a hollow cocoanut shell half-filled with water. On one side of the shell is inserted a pipe, which is connected with the fire-pan and tobacco-holder (chillam), and on the other side is inserted another tube, which goes into the mouth of the smoker. When the smoker draws, the smoke from the first pipe (the end of which is under water), is drawn up with a bubbling noise through the water (hence the term hubble-bubble), and is thus cooled and purified. The flexible tube (necha) of the more elaborate hookah is made of a long coil of iron wire covered with cloth and ornamented. This was invented in Akbar's time. A hookah for smoking madhan (opium), with a peculiar shaped chillam, is called Madhaki. In Lower Bengal the lower orders frequently smoke in companies, with one hubble-bubble or narel or kalli, which are the most ordinary and cheap forms. All sitting round in a ring, the pipe passes from one to another, each taking a few whiffs as it passes. This is never done by the higher orders, nor is it done in Hindustan. The Sulfah form of hookah is the commonest in Kābul and Peshawur. The hookah has almost ceased to be used by Europeans in India, but natives continue to use it with gurnko or prepared tobacco. Some hookah-snake tubes are very costly, the precious metals and precious gems being largely employed in their manufacture. The snake or pliable ornamental tubing lengthens out into several coils, and the smoke passes through a water-vase, while the mouthpiece is of amber, silver, etc.—*Simmonds' Dict.*; *Robinson's Travels*, ii. p. 226.

HOOKER. Sir Joseph Dalton Hooker, K.C.S.I., M.D., F.R.S., D.C.L., LL.D., was born 30th June 1817. In 1839 he entered the navy as Assistant-Surgeon, and up till 1843 he was Botanist of the antarctic voyage of exploration by the *Erebus* and *Terror* under Captain (Sir) James Clark Ross; and between that year and 1860 he published the *Flora Antarctica*, *Flora Novæ Zelandiæ*, and the *Flora Tasmaniaica*, in six quarto volumes. Between 1847 and 1853 he visited the N.E. of India, and published in two volumes a journal of his travels in the Nepal and Sikkim Himalayas. When on the frontier with Dr. Campbell, the raja of Sikkim seized and imprisoned both of them for some weeks. He published in a folio volume the *Rhododendrons of the Sikkim Himalayas*, and several communications in the journal of the Bengal Asiatic Society; and he and Dr. Thomas Thomson commenced a *Flora Indica*, of which one volume appeared; but later on he renewed the publication of the *Flora of British India*, and up to 1883 three volumes were completed. He also wrote *On the Structure of the Balanophoræ*, *On the Origin of the Pitchers of Nepenthes*, *On the Distribution of Arctic Plants*, in 1860; *Essay on the Flora Tasmaniaica*, A Memoir on the *Welwitschia Mirabilis*; also *Students' Flora of the British Islands*, and *Primer of Botany for the use of Beginners*; and along with Mr. Bentham, *Genera Plantarum ad exemplaria imprimis in Herbariis*

HOOLOCK GIBBON.

Kewensibus servata definita. On the death in 1865 of his father, Sir William Hooker, he succeeded to the office of Director of the Royal Gardens, Kew.

HOOLOCK GIBBON. *Hylobates hoolock*, the white-handed gibbon (H. lar.). The long-armed apes or gibbons constitute a very distinct section of quadrumanous animals, confined to the Malay countries of Southern Asia and the adjacent islands. They do not usually bear captivity well.

HOOLIOOGOO, grandson of Chengiz Khan. See Hulaku.

HOOLY, a Hindu festival in honour of Krishna, which takes place in the month Phalgun, February—March, at the commencement of the joyous spring. The amusements on this occasion consist in dancing, singing, and play. Their songs are called Kavir, or extempore stanzas, principally in allusion to the charms of Krishna and his amours with the Gopin, and are not marked by an excess of delicacy. One of the dances is the favourite Tipri dance, or Rasa mandala, in which 20, 30, or more form a ring, each having a short stick in the hand, with which the dancer strikes alternately those of the persons before and behind him, keeping time with it and his foot; the circle moves round, keeps time to a drum and shepherd's pipe of three or four sweet and plaintive notes. In Major Moor's Hindu Pantheon is a beautiful plate on this subject, in which Krishna (with Radha) in the centre is described as the sun, and the circle of dancers as the heavenly bodies moving round him. In the hooly, the players throw a red powder, sometimes mixed with powdered talc to make it glitter, into the eyes, mouth, and nose, or over the persons of those who are objects of the sport, splashing them well at the same time with an orange-coloured water. The powder is sometimes thrown from a syringe, and sometimes put into small globules, which break as soon as they strike the object at which they are aimed. The Hindu women are expert in throwing these. The hooly among the Hindus reminds one strongly of the Saturnalia of the Romans: people of humble condition take liberties with their superiors in a manner not admissible on other occasions. The chief fun in public is throwing the coloured powders above alluded to on the clothes of persons passing in the streets, and squirting about the tinted waters. Dignified personages avoid as much as they can appearing abroad while these jocularities are passing, unless with the view of gaining popularity they condescend to partake in them; in general they confine themselves to their houses, and amuse themselves with their families. In pictures, belonging to a series illustrating the domestic occupations of the Indians, the family diversions of the hooly appear like those more publicly exhibited,—scattering yellow and red powders, and squirting coloured water. Sending simpletons on idle errands contributes also to the delights of the hooly; this is performed exactly similar to our ceremony of making April fools on the first of that month, and is common to all ranks of Hindus; and Mahomedans, indeed, join in this, as well as in other items of hooly fun and humour. Another opportunity of merriment, similar to the May-day gambols of England, is afforded to the Hindus in a festival in honour of Bhawani, that always falls on or near that day.—*Cole. Myth. Hind.* p. 382; *Moor's Hindu Pantheon*. See Holi.

HOPOE, birds of the genus *Upupa*, of which

HOPEA PARVIFLORA.

in India are *U. epops*, *Linn.*, *U. nigripennis*, *Gould.*, *U. longirostris*, *Jerdon*. *U. epops* is common in Southern Asia during the cold season, and on the table-lands at all seasons. It is to all appearance a bird of fluttering and feeble flight, but has repeatedly been observed, during the seasons of migration, at altitudes considerably above the limits of vegetation. On the western side of the Lanak pass, about 16,500 feet, Major Cunningham saw a hoopoe; also at Momay (14,000 to 15,000 feet elevation), under the lofty Donkia pass in Northern Sikkim.

HOORMUZ, the name of one of those Parthian kings known to the Romans as Artabanus. There were five of the name Artabanus, the first in B.C. 216, and the last about A.D. 235, and with whom ended the Arsacidae, he having been slain by one of his officers, Ardeshir Babegan (Artaxerxes) who became the first of the Sassanidae. It is supposed by Malcolm that Artabanus III. was the Shahpur of the Greeks. His son Vonones reigned for a short period. His name is sometimes written Pollas. He was the Volageses of the Greeks, whose war with the emperor Nero and embassy to Vespasian are related in the Roman history. Hoormuz appears to have been Artabanus IV. of the Romans.—*Malcolm's Persia*, i. p. 85.

HOPEA, a genus of plants of the natural order Dipterocarpaceae. The Thin-ga-do of the Burmese, a species of *Hopea*, is a large tree which abounds in the same localities of British Burma as *H. odorata*, but the wood is not equally valued. A cubic foot weighs 52 lbs. It sells at 12 annas per cubic foot. *H. decandra*, *Buch.*, called Ooroopa in Malayala, is a tree which the natives of Canara prefer to teak for building ships, being more durable and close grained. *H. discolor*, *Thw.*, is a large tree of Ceylon, growing in the Saffragani and Ambagamowa districts at no great elevation. The under sides of the leaves are of a rich brown colour. *H. faginea*, *Wall.*, is a tree of Penang. *H. floribunda*? The-ah, also Tan-the-ya of the Burmese, is a very large tree of Tavoy.—*Thw. Zeyl.*

HOPEA ODORATA. *Roxb.*

Then-gan, . . . BURM. | Then-gan-pha-yung, BURM.

This species grows in Chittagong and Burma, and is considered the most valuable indigenous timber tree in the southern provinces of Tenasserim, and at Tavoy and Mergui is sawn up for building purposes. The then-gan trees grow to a height of 250 feet; they are found near Moulmein in laterite and sandstone chiefly. The best canoes are made of it, and it is used extensively in native boat-building. It is a light-brown wood, is used extensively by the Burmese in the construction of boats carrying 3 or 4 tons, formed from the trunks of these magnificent trees. The trunk is scooped or burnt out, and stretched in the centre, whilst warin, by means of cross pieces of wood. When the required breadth is obtained, the sides are built up to obtain a greater capacity. These tree-boats, if they may be so called, are from 7 to 8 feet beam. The breaking weight of *H. odorata* may be stated at 800 lbs., with a specific gravity of 45 to 46 lbs.—*Drs. Mason, McClelland, Roxb.*

HOPEA PARVIFLORA. *Bedd.*

Kiral boghi, Ghats of S. CAN. | Iru-bogum, . MALABAR.
Tirpu, . Plains . . .

A large, handsome tree, common both in the moist and dry forests in Malabar and S. Canara, up to an elevation of 3500 feet. The

HOPEA SUAVA.

wood is hardly known commercially as yet, but it is much valued by the natives in S. Canara; and Colonel Beddome believes it will be of great value for gun-carriage purposes, and will also answer well for sleepers. In S. Canara it is much valued for temple-building purposes.—*Beddome*.

HOPEA SUAVA. *Wall.* Engyin, BURM. A valuable tree found in the Eng forests of British Burma, but large trees are not common in Pegu. Wood tough and hard, but heavy, used in house-building, for boats, and a variety of other purposes, and said to be as durable as teak. A cubic foot weighs 55 lbs. In a full-grown tree, on good soil, the average length of the trunk to the first branch is 60 feet, and average girth measured at 6 feet from the ground is 7 feet.—*Dr. Brandis*.

HOPEA WIGHTIANA. *Wall.* A variety of this tree is the *H. glabra*, *W. and A.*, very common in many of the western Madras forests. The timber is very valuable, and very similar to that of *Hopea parviflora*. One variety, the Kong of Tinnevely, is par excellence the timber of that district. Another variety is abundant in the S. Canara district, where it is called Kalbow and Hiral bogi; it is a first-rate coppice firewood, and large tracts in this state are met with in the plains of that district, never apparently flowering, but abundantly covered with the abortive fruit-like echinate excrescence, much like the young fruit of a Spanish chesnut; it is probably the formation of some insect in the bud of the panicle. A somewhat similar formation occurs in *Hopea parviflora*.—*Wall.*; *Beddome, Fl. Syl.* p. 96.

HOPPER, the Appa of the Singhalese, and Apum of the Tamils. In Southern India, cakes made of wheaten flour and cocoanut milk. The Appas of the Bombay Presidency are made from the *Sorghum vulgare*, and are of rice-flour in Ceylon.

HOPS.

Humle, . . .	DA., SW.	Luppoli, . . .	IT.
Hoppe, . . .	DUT.	Humulus lupulus, .	LAT.
Houblon, . . .	FR.	Chmel, . . .	RUS.
Hopen, . . .	GER.	Oblon, . . .	SP.
Bruscandoli, . . .	IT.	Lupulo, . . .	SP., PORT.

The hop plant has been introduced into India, grows well at Kaolagir in the Doon, but flowers sparingly. It has yielded enormously in Australian colonies, in Victoria, along the valleys of Gippsland, and other localities, to the extent of 1500 lbs. an acre. The properties of hops, of giving the bitter to beer and preventing acetous fermentation, enable it to be kept much longer. To it, no doubt, is owing a portion of the stomachic properties of malt liquor, as we see exemplified in the bitter, often called Indian, ales. Hops are hypnotic, especially when stuffed into a pillow, but they should be first moistened with spirits, to prevent the rustling noise. Fomentations also have been used. Hops are thought to be diuretic (as is also the root), and to be useful in correcting lithic acid deposits.—*Royle*; *Von Mueller*.

HOR or **HOR-PA.** TIBETAN. Kao-tze, CHIN. This race call themselves Ighur. They seem to be Bhot. They dwell on the north-western frontier of Tibet, on the confines of the Turk districts of Little Bokhara. Some of them are Mahomedans, and Mr. Hodgson considers them to be Turks.—*Latham's Ethnology*.

HORA. SANSK., LAT. The 1-24th part of the natural day, answering to a European hour.

The Vira or solar day in Hindu almanacs is

HORDEUM.

reckoned from sunrise to sunrise, and is divided into 24 hora or hours, and each hora of the day is ruled by one of the planets in turns, the rotation being the Sun, Venus, Mercury, Moon, Saturn, Jupiter, and Mars.—*Kala Sankalita*. See Tithi; Vara.

HORA, a goddess of Byblus, worshipped at Babylon as Hea, the equivalent of Juno. Her name in Tyre was Itea.—*Bunsen*.

HORA-ALIA. SINGH. A rogue or must elephant.

HORA-BORA, a tank, now in ruins, in the Bintenne district of Ceylon. Its length is 8 or 10 miles, and breadth 3 or 4. The embankment is from 50 to 70 feet high, and its base is 200 feet broad.—*Tennant's Ceylon*.

HORANAWA, a shrill musical pipe in use with the Kandians. Its tones have some resemblance to those of the bagpipe. Its mouthpiece is made from the talipot leaf, and its other parts of jack-wood and brass.—*Sirr's Ceylon*.

HORDE, an introduced English word from the Turkoman word Urdu, a camp.

HORDEUM, a genus of plants of the natural order Panicaceæ, furnishing the barley so much used by the more northern nations of the world.

- H. distichon*, Linn., 2-rowed barley.
- H. deficiens*, Stendel, of Red Sea, 2-rowed barley.
- H. hexastichon*, Linn., 6-rowed barley.
- H. vulgare*, Linn., 4-rowed barley.
- H. zeocriton*, Linn., 2-rowed barley.

To this species belong the sprat, battledore, Fulham, Pultney rice, and Turkish barley, and the Dinkel.

English barley is that with 2-rowed ears, and its botanical name is *Hordeum vulgare distichon*. The Scotch *bere* or *bigg* is the *Hordeum vulgare hexastichon*. It has two rows of ears, but three corns come from the same point, so that it seems to be 6-eared. The grains of *bigg* are smaller than those of barley, and the husk thinner. The kinds of barley especially cultivated for making pearled barley or malt, are *Hordeum perlatum*, *H. distichon B.*, *Zeocriton commune*, *Hordeum mundatum*. These are technically known as Scotch and French pearl barley, battledore barley, German rice, sprat barley. *Fero de ozzo* is made from sprat barley.

Professor Einhof analyzed 1000 parts of barley flour, and found it to contain 720 of starch, 56 sugar, 50 mucilage, 36.6 gluten, 12.3 vegetable albumen, 100 water, 2.5 phosphate of lime, and 68.0 of fibrous or ligneous matter.

• The specific gravity of English barley varies from 1.25 to 1.33; of *bigg*, from 1.227 to 1.265. The weight of the husk of barley is 1/6, that of *bigg* 2/9. Professor Ure states 'specific gravity of barley is 1.235 by my trials.'

H. ægiceras, *Royle*, MSS., has ears cylindrical; florets arranged in a confused manner, not in rows; awns soft, short, hooded, and bent downwards; grains loose in the husk. It is found in the northern parts of India, and probably in Tartary, as its grains have been sent to England under the name of 'Tartarian wheat.' Its appearance is more that of wheat than of barley, and its naked grains assist the resemblance. It is, however, a genuine species of *Hordeum*. It appears to be a productive plant, but little is as yet known of its quality in the climate of England.

H. gymnodistichon has the ear cylindrical,

awns almost parallel with the ear; grains loose in the husk. Naked barley, a species but little cultivated now, is of unknown origin. It is said to have been introduced into England in the year 1768; but it is reported to have preserved its characters unaltered from time immemorial in some parts of Europe.

H. gymno-hexastichon has the ear cylindrical; awns very long, rough, and rigid, rather spreading away from the ear; grains loose in the husk. The original of this, the naked 6-rowed barley, is unknown. It is extremely productive, and in some parts of Europe it is reckoned the most valuable of all. The French call it, on account of its good qualities, *Orge celeste*.

HORDEUM CELESTE.

Chama, . . . BIOT. | Elo, . . . CHENAB.
Grimmas (husked), . . . | Ua-jo, Ua, KHAS, SUTLEJ.

This is found in the Sutlej valley between Rampur and Sungnam up to 15,000 feet. The beardless variety is most esteemed. Barley ripens in the end of May, several weeks before wheat. The dough made of it is called 'ampe' in Ladakh.

HORDEUM DISTICHON. Linn.

Zoocritum distichon, Beauv.

Shair, . . . ARAB. | Shoreh, . . . HEB.
Mu-yau, . . . BURM. | Jao, . . . HIND., PERH.
Krithe of Dioscorides, GR. | Barley arisi, . . . TAM.

Barley of Exodus ix. 31, the summer barley of England. This is commonly stated to be a native of Tartary. Colonel Chesney found it wild in Mesopotamia, upon the banks of the Euphrates. It is much cultivated in Europe, and is the common summer barley of England, and that which cultivators seem to prefer. Its ears are not so large as those of *H. hexastichon*, but the grains are heavier. Ear cylindrical; awns almost parallel with the ear; grains adhering to the husk.

HORDEUM HEXASTICHON. Linn.

Shair, . . . ARAB. | Yoa of, . . . KANGRA, JAV.
Juvo, . . . BENG. | Soa, Jhotak, . . . LADAKH.
Mu-yau, . . . BURM. | Shiroka of, . . .
Thanzatt, Nai, CHENAB. | To-sa of, . . . NEPAL.
Jaw, Jawa, . . . | Tro, Ne, of, . . . PANGRA.
Sa-too, . . . DUKH. | Situs-hooka, . . . RUM.
Ijeir, . . . EGYPT. | Chak of, . . . SUTLEJ, SW.
Krithe of Dioscorides, GR. | Yava, Yava biy-yamyuTEL.
Shoreh, . . . HEB. | Pachcha yava, Yavalu, . . .
Jao, . . . HIND., PERH.

Common or winter barley is grown in N. India. It is frequently cultivated as a cold-weather crop in the plains of the Panjab, as it requires less labour and gives more produce than wheat even in inferior soils, and where the water is deep below the surface. Above 8000 feet of elevation it is much more common than wheat, while at lower heights it is less grown. In Lahoul and Ladakh it is abundantly cultivated with *Fagopyrum* up to 13,000 feet in Ladakh. Some kinds of barley may be seen up to 14,000 feet about Hanle, near the Tsomoriri lake, and this is found in the Sutlej valley between Rampur and Sungnam at an elevation of highest limit 15,000 feet, and much cultivated. Barley is cultivated much in the same way as wheat, but is ready for cutting somewhat sooner; it is grown much on 'ailaba' and 'barani' lands. In the Panjab it is much less esteemed than wheat, and sells much cheaper, though it produces much more, and requires worse lands and less watering than wheat. The varieties are *Jau-desi* (common country barley) and *Jau-paighambri*. Ghoni jau is barley that has scarcely

any husk at all, but only a fine skin. Barley is one of the cheapest of the grains found in the bazars of Kaira, in Gujerat.—*Powell; Cleg. Panj. Rep.; Stewart*, p. 256; *Eng. Cyc.*, quoting *Low's Elements of Agriculture*, p. 238; *Voigt*.

HOREB and Mount Sinai are part of the Jabl-ul-Tur range, with Hor or Seir, now called Jabl Harun, or Aaron's mountain.

HOREHOUND, BLACK, *Ballota nigra*; white, patch leaves.

Horehound, white; *Marrubium vulgare*, Linn.

Pucha pat, . . . BENG. | *Marrubium Indicum*, LAT.

This plant grows at elevations of 2000 to 7000 feet in the N.W. Himalaya, in Kashmir, the Salt Range, on the Chenab and Trans-Indus. The leaves are of a whitish-grey colour, having a woolly appearance, and possessing a faint agreeable odour, and a sharp, bitter taste. That met with in Bombay is imported from Singapore, and is used in various ways by the natives, but chiefly as an ingredient in Guraku, and, when combined with other herbs, for scenting the hair of women. The essential oil is in great request among the superior classes of natives, for imparting the peculiar fragrance of the leaf to clothes.—*Faulkner; J. L. Stewart*.

HORINGHATA, one of the mouths of the Ganges.

HORMARA, a section of Baluchistan, adjoining the Arabian Sea. The Hormara tribe say they came originally from Sind.

HORN.

Hoorn, . . . DUT. | Tanduck sungu, MALAY.
Corne, . . . FR. | Rogg, . . . RUS.
Sing, GUJ., HIND., KARN. | Cuerno, . . . SP.
Corne, . . . IT., POR. | Kombu, . . . TAM.
Cornu, . . . LAT. | Kommu, . . . TEL.

The horns of animals are largely utilized in the manufactures of the south and east of Asia; and those of the bison, buffalo, elk, ibex, goat, antelope, deer, oxen, and rhinoceros are largely imported or re-exported. Horn of kinds is extensively used in the manufacture of handles for knives, walking-sticks, spoons, combs, lanterns, snuff-boxes, powder-flasks, buttons, hairpins, etc. In China, buffalo horns are worked into lanterns, some of which are highly elegant. Chessboards, work and knitting boxes, tea-chests and tea-caddies, inkstands, baskets, etc., which are lined with sandal-wood, are generally very neatly made at Vizagapatam. But they are far surpassed, both in cheapness and workmanship, by articles of a similar description, the produce of German industry, which are largely imported into England.

In China, lanterns made of horn shavings are largely used. Horn is softened by very intense heat, and then extended into thin laminae of any shape. The best sort of rhinoceros horns come from Cochin-China, and sell at times for 300 dollars a-piece; an inferior sort is imported into China from India, of which some probably are from Southern Africa, which are sold for 30 dollars and upwards a-piece. The Chinese work the finest of these horns into elegant cups and other articles, but the most of the importation is used as a medicine. It also forms an article of commerce in the Chinese junks trading to Japan. The deer-horns and antlers exported from India are the dense antlers of the sambar (*Cervus hippalephus*), of the barking deer (*Cervus muntjac*), of the axis (*Cervus axis*), the nil-gai

(*Damalis rusa*), and other species; also the horns of the thar, gural, and yak. Horns exported from India,—

Year.	Cwt.	Rs.	Year.	Cwt.	Rs.
1874-75,	58,175	7,62,399	1877-78,	88,783	10,42,009
1875-76,	55,755	8,06,652	1878-79,	67,828	13,78,667
1876-77,	71,890	12,80,051	1879-80,	57,204	12,68,321

Horn-bows are sometimes used in the armament of some Chinese troops.

HORNBEAM, *Carpinus viminea*.

Shirash of . . . BEAS. | Imar of . . . SUTLEJ.
Charke of . . . RAVI.

A moderate-sized tree growing in the N.W. Himalaya, at from 5500 to 6000 feet up to the Ravi. Its wood is esteemed by carpenters.—*Dr. J. L. Steecl*.

HORNBILL, birds of the family Bucerotidae, genera anorhinus, berenicornis, buceros, homiraius, hydroticiss, meniceros, tockus, aceros, cranorhinus, rhyticeros, and rhinoplax, the shapes of whose bills arrest attention. Their food consists of fruits, berries, flesh, and even carrion.

B. cavatus; body and wings black, greater coverts and quill-feathers tipped with white; thighs, upper and under tail coverts, white. It is a native of India, the Himalaya mountains, Java, and most of the islands of the Archipelago.

B. pica, *Scopoli*, is the *B. coronata*, *Boddaert*. The female is built up in the nest and fed by the male during incubation. This hornbill abounds in Cuttack, and bears there the name of Kuchilakhai, or Kuchila-eater, from its partiality for the fruit of the *Strychnos nux vomica*.

B. rhinoceros, the rhinoceros hornbill. The bill about 10 inches long, and of a yellowish-white; the upper mandible red at the base, the lower black; the horn or casque varied with black and white; the body black, of a dirty white below and posteriorly; tail about 12 inches, the feathers white at the base and tip, black in the middle. It is a native of India and the Indian islands.—*Eng. Cyc.*; *Goold*; *Tennant's Ceylon*. See Birds; Buceros.

HORNED HOG, the babirusa, inhabits the woods of Java, Celebes, and others of the larger Sunda isles. Its upper tusks are of great length and curved form, and grow upwards and backwards like the horns of the Ruminantia. It is probably the *Sus tetraceros* of *Aelian*.—*Eng. Cyc.* p. 359.

HORNET, *Tsireah*, *HEB.*; *Crabo*, *LAT.*

HORPA, Turkish tribes, so called by the Tibetans, and known to the Mongols as Bada Hor.

HORRE, *SINGH*. A hard, though coarse, open-grained, heavy Ceylon wood, *Dipterocarpus laevis*.

HORSBURGH, JAMES, whose name is indissolubly connected with the history of the Marine Surveys of India, was a native of Scotland. He began life as a cabin boy, but soon rose to the command of a vessel in the eastern seas, and gave rein to his innate love of surveying. After many years, he returned to England, and a set of his charts, engraved by Walker, placed him at once in the first rank of hydrographers. About 1804 he published the first edition of his East Indian Directory, and on the 10th November 1810 he was appointed to examine the journals of the East India Company's ships, and became Hydrographer. From that time till his death in 1836, all charts passed under his scrutiny, and were published

under his superintendence. Fourteen charts actually compiled by himself, were published by the East India Company, from the N. and S. Atlantic to the Archipelago. His Directory went through six editions, in 1809, 1836, 1841. After the middle of the 19th century, Mr. Findlay printed one on that of Horsburgh, and in 1871 Captain Taylor printed another.

In his honour a lighthouse was erected on Pulo Aor, near Pedra Branca. His sailing directions are reckoned indispensable in navigation. The island of Pedra Branca is called Batu Putih by the Malays, both these terms signifying white rock. Prior to the quarrying operations on it, it was covered by the dung of the numerous sea-birds that frequented it as a resting-place. The rock is situated at the extremity of the Straits of Singapore, nearly in mid channel; and as it advances beyond the mouth of the Straits considerably into the China Sea, it has for ages served as the principal leading mark to vessels passing out of, or into, the Straits.—*Dr. Buist's Catalogue*; *Journ. Ind. Archipelago*, 1852; *E. I. Marine Surveys*, P. P., 1871.

HORSE.

Hisian,	ARAB.	Asp,	PERS.
Son; H'nyet,	BURM.	Kon,	POL.
Hest,	DAN.	Loschad,	RUS.
Paard,	DUT.	Asu; Hyar,	ANWA, SANSK.
Cheval,	FR.	Caballo,	SP.
Pferd; Gaul,	GER.	Hast,	SW.
Teser,	GR.	Kudri,	TAM.
Sus,	HEB.	Guramu,	TEL.
Ghona,	HIND.	Sukk,	TURK.
Cavallo,	IT.	PORT. Cell,	WELSH.
Equus, Caballus,	LAT.	Aspa,	ZENI.

The king Sesonchosus of Egypt is supposed to have been the tamer of the horse. But, from time immemorial, the horse has been domesticated and subservient to man, and been largely used in war. An ancient eastern prince (*Job xxxix. 19-25*) describes the horse as a creature which

'Mocketh at fear, and is not affrighted;
He saith among the trumpets, Ha! ha!
And he smelleth the battle afar off,
The thunder of the captains and the shouting.'

Judging by its varied names, the horse seems to have been very generally diffused over the central parts of the old world, some of the terms being derived from its neigh. Amongst every nation of the old world its use and beauty have made it a favourite. Supernatural powers have even been attributed to it by some nations. It was sometimes considered the most acceptable sacrifice that could be offered to heathen deities; and we read in 2 Kings xxiii. 11 that Josiah took away the horses that the kings of Judah had given to the sun. According to Herodotus, the horse was the most appropriate offering that could be made to the sun, on account of its great swiftness. The Persians dedicated horses to the sun; and Sextus Pompeius sacrificed to Neptune by throwing horses into the sea.

During the Hindu rule in Hindustan, prior to the advent of the Mahomedans, the horse was offered in sacrifice by sovereigns claiming paramount power. See Aswa Medha.

The sacred horses of the Germans were white, and the device of the Saxons was a white horse. Marco Polo tells us that 100,000 white horses were presented to the Great Khan on New Year's

day; and the Tartar chiefs continued at least to the time of Kan-gi to present a tribute of white horses to the emperor. Native princes in all parts of India continue fond of white horses, and generally have one or more favourites of this colour in their stud. A favourite colour for state occasions is cream-colour. The royal carriage of Britain on state occasions is drawn by six cream-coloured horses. The horse represented on Greek and Roman bas-reliefs was a small, compact, and spirited-looking little animal, not larger than what we would call a pony, but he must have been perfectly trained, for neither bridle nor bit nor saddle was used by his rider, who guided him by a small stick, tapping him on either side of the neck as he wished to turn.

Naturalists generally believe that the varieties of all horses have descended from one species, but there are at present numerous varieties, presenting great differences in size, shape of ears, length of mane, proportions of the body, form of the withers and hind quarters, and especially of the head, and the pedigree of a racehorse is generally more to be relied on in judging of its probable success, than its appearance.

The horse can bear both intense heat and intense cold. In Siberia are wild horses in lat. 56° N., and he comes to the highest perfection in Africa and Arabia. Much humidity seems more unfavourable to the horse than heat or cold; and this, perhaps, will explain why, to the eastward of the Bay of Bengal, over a humid area of enormous extent, in Burma, Siam, Malayan Archipelago, the Loo-Choo Islands, and a large part of China, full-sized horses do not occur. In Japan, farther east, they recur. The range of colour in horses is very great. The English racehorse is said never to be dappled; cream-coloured, light and mouse-coloured duns are occasionally dappled. Horses of varied colours, of diverse breeds, and from various parts of the world, have a tendency to become streaked, and racehorses often have the spinal stripes, the stripe being generally darker than the other parts of the body; they occur across the shoulder and on the legs. Darwin considers the whole horse genus to have had for a progenitor an animal striped like a zebra (but perhaps otherwise very differently constructed), the common parent of our domestic horse, whether or not it be descended from one or more wild stocks of the ass, the hemionus, quagga, and zebra. He says that the spinal stripe in the English racehorse is more common in the foal than in the grown animal. The ass not rarely has distinct transverse bands on its legs, like those on the legs of the zebra. The spinal stripe occurs on horses of all colours, but on the mouse duns and on duns the transverse bands occur on the legs, and sometimes also a faint shoulder stripe. In the Kattyawar breed, a horse without stripes is not considered purely bred. The spine is always striped and the legs barred, and a shoulder stripe is common, and sometimes is double or treble. The ass has almost always a dark stripe or band on the shoulder, which is sometimes even double, but is always variable in length and breadth. The koulan of Pallas has been seen with a double shoulder stripe. The hemionus has no shoulder stripe, but their foals' legs are generally striped.

The prevailing belief amongst the Europeans in

India, is that the native breeds of horses have decreased under British rule. Up to the beginning of the 19th century, there were several horse fairs in Rajputana, especially those of Bhalotra and Poshkur, to which the horses of Cutch and Kattyawar, the Lakhi jungle, and Multan, were brought in great numbers. Valuable horses were then bred on the western frontier, on the Looni, those of Rardurro being in high estimation. But after the successes of the British over the Mahrattas and the Pindars, the breeding studs of Rardurro, Cutch, and the jungle became almost extinct, and the horses from the west of the Indus were carried to the Sikhs. The destruction of the predatory system, which had created a constant demand, lessened the supply. The Lakhi jungle was well known in India for its once celebrated breed of horses, which became extinct in the early part of the 19th century.

Colonel Henry Shakespeare thinks that the cause of the decline of the native horse in India, arises from the fact that Government has encouraged the supply of a larger description of animal than the country naturally produced, and the hardy small breeds of native horses have thus been neglected. Perhaps, however, the chief causes of the decline in their numbers, is their non-requirement for the predatory bands and Parthian-like cavalry, since the contentions of the princes of India have been suppressed; also cultivation has been extending over grazing lands; and as the former governments of India and their military servants were the largest buyers of horses, though the British continue to buy extensively, the soldiers and the guns of the British Indian army are larger than those in use by former native powers, and the British admit only horses into the ranks of their armies, and even in their equipage a mare is rarely seen.

Punjab.—Under native rule, the Panjab maintained an enormous cavalry force, mounted chiefly, if not entirely, on horses bred in the country, but that territory is now unable to meet the demands of its irregular force, which is numerically insignificant compared with that kept up by the Sikh Government. The reasons assigned for this are three in number:—1st. Large numbers of brood mares were withdrawn from the Panjab at the time of the annexation; 2d. Extensive demands were made on the province for both horses and mares during the mutiny; and 3d. A large proportion of the re-mounts of the Sikh army were mares, which were regularly bred from; but under the British system, which requires re-mounts to be available for service at all times of the year, this cannot be done. It has therefore occurred that mares introduced into irregular cavalry corps, on account of their tractable nature, are not permitted to breed; and the result is that every one bought up for military purposes, and even every one bought up by the European community, may be regarded as a brood mare lost to the country. It has also been ascertained that breeders are parting with their best mares. The Dhunni caste, of the Rawal Pindi districts, the best in the province, is almost extinct from this cause. Yet many excellent brood mares were left, especially in the Rawal Pindi, Jhelum, Gujerat, Gugaira, and Lahore districts. There were also very good mares in the frontier districts, such as Bunnu, Kohat, Dehra Ismail Khan, and Dehra Ghazi

Khan. Although small, they possess good blood and great powers of endurance, which is everything in the horse.

Palanpur has a really good breed, the mares of which are justly and highly esteemed, and command considerable prices even among natives.

In *Rajputana*, few of the princes have generally good horses in their territories. The Marwar horse contains apparently much Kattyawar blood, and, bred with great care in many places throughout the country by the thakurs and others, is a valuable animal in every respect. Good mares are also scattered, but the generality of horses met with are inferior animals in every respect.

The breed of horses in *Jeypore* is exceedingly poor, as little care has been taken to improve the country animal in any way. Some few of the thakurs possess and breed good animals. The horses of *Shikawutti* are said to be good.

Bunni Singh, raja of Ulwar, founded a fine breeding stud, consisting of well-selected Arabs and Kattyawar horses, and in Ulwar the troopers were better mounted than native cavalry generally, and a better stamp of horses was met with than in any other Rajput state. The finest of his cavalry were, however, almost annihilated on meeting with the rebels in superior numbers in 1857.

In *Bhurtpur*, also, some attention was given to the breed of horses, but they are inferior to those of the Ulwar district.

The *Dekhan* breed of horses was highly improved about the beginning of the 19th century by crosses with the Arab horse. The small blood-horse of the Bhima valley or Terai are of this breed, and the mares are beautiful. The horse very rarely grows above 14 to 14½ hands in height, but has the fine limbs, broad forehead, and much of the docility and all the enduring properties of the Arabs, and has been mistaken for them. He is not so fiery as the small and blood Arab, and more manageable in the ranks. Malligaum, about 25 miles from Ganga Kheir, on the Godavery, is a great mart for the Dekhan horse, and purchasers from all parts of the Peninsula annually resort to the fair. Some of the horses are really very fine. In the Dekhan, the larger horses are bred about the Gor river and Aligaum, between Poona and Ahmadnagpur.

The *Hyderabad* territory in the Dekhan can breed about 2000 horses a-year, and 500 good colts could be purchased at lower rates there than are paid for Arabs or Cape or Australian horses.

The low-statured horses of the *Bhima* and *Man* rivers, the *Bhima Terai* and *Man Terai*, are good. The *Bhima* horse has all the best points of the high-bred Arab, without his very fine skin, irritable temper, and rather long pasterns, and has generally better feet. The marches of the *Mahratta* and *Pindari* horsemen during the early part of the present century are well known, and the *Mahratta* pony to this day, when of the proper breed, commands a high price in the Indian markets. The little ponies used in *Madras* in the *Jatka* carriages, are brought from *Poona*, *Sholapur*, *Hubli*, and *Dharwar*. A few are brought from *Kangayam* in the south of the *Peninsula*. A good pony costs 150 rupees.

The *Tattu*, or pony of the Dekhan, is a wonderful animal, often with great speed, or great strength and much endurance. Their colours are generally bay, or brown, or chestnut; grey seldom, and dun

still more so. They are generally taught to amble four or five miles an hour.

The *Kathi* or *Kattyawar* horse is a large and powerful blood animal. They have fine lean heads, and make admirable cavalry chargers; commonly of a dun colour, with black points and black manes and tails. All have the shoulder stripe. It has been said, but not seemingly with correctness, that few of the Kattyawar horses of the present day are of the real Kattyawar breed, being much crossed with Arabs and half-bred horses of sorts. The pure bred *Kathi* are fine powerful horses, with one great deficiency in shape,—a want of bone below the knee, and a fiery screaming temperament. This breed is specially preferred by native chiefs, who give very large sums for handsome Kattyawars.

The *Ghoont* or *Khund* is a breed of the Himalaya mountains, generally small, strongly made, hard-mouthed, and sometimes almost unmanageable. In ascending hill faces, or passing along the declivities of mountains, it is best to let them have their own way, for in an intricate passage they often show more sagacity than the rider. Their common pace is a kind of amble, and they stop every now and then to breathe, when no application of the whip will move them. They are sure-footed, and sometimes halt at the edge of a precipice, to the terror of the rider; they are not so quick in ascending hills as the low-country horses, but they descend with double the speed, and endure great fatigue. The *ghoont*, though a useful animal, seldom carries any burden but a man. In *Spiti* they are bred chiefly for sale. They have two breeds, one a small *ghoont*, never above 12 hands high, peculiar to the country; and the other, a large breed from 13 to 13½ hands high, is bought from the Chinese, and usually comes from *Choomoortee*; for a Chinese *ghoont* two years old they give a *Spiti* *ghoont* four years old. All are equally hardy, and are kept out the whole winter, except the yearlings, which are housed. During winter the *ghoont* live on the roots of the stunted bushes, and are very expert at scraping the snow from off them with their fore feet. The breed of *ghoont* might be improved with a little care. Many are killed during winter by wolves and leopards.

The *Yarkand* pony is a hardy little animal, and fetches a high price, being in request for the hill-stations in the North-Western Provinces of India. The variety called the *Tangun piebald* is common. They are shy and timid at first, and evince a strange dislike to Europeans, but soon get accustomed to their new masters; and for their strength, endurance, and sure-footedness, are well adapted for alpine travelling. While crossing the *Karakorum* mountains, whole caravans are sometimes overwhelmed by snowstorms; and *Hillah Shah*, a chief merchant of *Leh*, mentioned that in many places the route to *Yarkand* was only traceable by the bones of horses.

The *Tanque* of Tibet are wonderfully strong and enduring. They are never shod, and the hoof often cracks, and they become pigeon-toed. They are frequently blind of one eye, when they are called *Zemik* (blind ones), but this is thought no great defect. They average £5 to £10 for a good animal in Tibet, and the best fetch £40 to £50 in the plains of India, where they become acclimated and thrive well. *Giantchi* (*Jhansi*-

jeung of Turner) is the best mart for them in the eastern part of Tibet, where some breeds fetch very high prices. The Tibetans give the foals of value messes of pigs' blood and raw liver, which they devour greedily, and it is said to strengthen them wonderfully; the custom, Dr. Hooker believes, is general in Central Asia. Humboldt (Per. Nar. iv. p. 320) described the horses of Caraccas as occasionally eating salt meat. In India, sheep's head is often given in mesalih. The Tibetan pony, though born and bred 10,000 to 14,000 feet above the sea, is one of the most active and useful animals in the plains of Bengal, powerful and hardy, and when well trained early, docile, although by nature vicious and obstinate.

In China, the horse commonly seen is not much larger than the Shetland pony. It is bony and strong, but is kept with little care, and presents a worse appearance than it would if its hair were trimmed, its fetlocks shorn, and its tail untied. This custom of knotting the tail is an ancient practice, and the sculptures at Persepolis show that the same fashion prevailed among the Persians. The Chinese language possesses a great variety of terms to designate the horse. The differences of age, sex, colour, and disposition are all denoted by particular characters. They are chiefly reared in the province of Kiung-si.

In the north also, in the vast plains, the Mongol, Tartar, and Manchurians rear horses, a docile, handsome, and intelligent breed, but do not generally exceed 10 or 12 hands; usually chestnut, bay, and grey. These are generally bred in a wild state, the stallions and mares being allowed to form herds in the plains at their will. Piebald or skewbald horses marked with patches of white and bay are to be seen. Horseflesh is eaten both by the Chinese and Mongolians, as also the flesh of mules and asses in many parts of China.

The horses of Japan average only 13 hands.

In the Archipelago, the horse has been immemorially domesticated by most of the more advanced nations, wherever it could be made use of. The chief exceptions are the Malay Peninsula, the eastern seaboard of Sumatra, and nearly the whole of Borneo,—countries in which the people dwell on the marshy banks of rivers, in which there is not even a bridle-path, and fit, therefore, only for the boat and the buffalo. The native horse is always a mere pony, seldom reaching 13 hands high, and more generally of about 12 hands. There are many different breeds, every island having at least one peculiar to itself, and the large islands several.

Sumatra has at least two distinct races,—the Acheen and Batubara, both small and spirited, but better adapted to draught than the saddle. The small but excellent breed of horses reared in Acheen excel all those of the Archipelago, excepting those of Bhima in Sumbawa. Those of Acheen have fine crests and good strong shoulders; in which latter particular, as also in height of wither, they differ very much from the horses of Java and the islands to the eastward, which are generally deficient in these points. They are exported to Penang and Singapore, and are driven in small carriages. They are occasionally sent to British India.

Of all the countries of the Archipelago, Java is that in which the horse most abounds, and here we find several different breeds, as those of the

hill countries, and those of the plains. Generally, the Java horse is larger than that of Sumatra, but, in the language of the turf, has less blood and bottom. The lowland horses, the great majority, are somewhat coarse and sluggish, but the upland are spirited, smaller, and handsomer.

The horse, although of a very inferior breed, is found in the islands of *Bali* and *Lombok*; but the next island to these eastward, *Sumbawa*, produces the handsomest breeds of the whole Archipelago. They are the Arab of the Archipelago; yet the blood is not the same as the Arab, for the small horse of Sumbawa, although very handsome, wants the fine coat and the blood head of the Arabian. There are in this island and adjacent islets three different races, that of Tambora, of Bhima, and of Gunong Api, the last being most esteemed.

Next to Java, horses are most abundant in *Celebes*. These are inferior in beauty to those of Sumbawa, but excel all others of the Malayan portion of the Archipelago, in combining the qualities of size, strength, speed, and bottom.

A very good breed is produced in *Sumba*, called in the maps Sandal-wood Island.

But perhaps the best breed of the whole Archipelago, although still but a pony, is that of the *Philippines*. It is superior in size to any of the breeds of the western islands, which it may owe to the superior pastures of the Philippines, and possibly to a small admixture of the Spanish horses of America, although this last is by no means an ascertained point.

Generally, the horses of the Archipelago are hardy, sure-footed, and docile. The horses are all entire, and the mares used only to breed and as beasts of burden. By the natives of the Archipelago, the horse is only used for the saddle or to carry burdens, and never for draught, either for plough or wheel-carriage. To see horses drawing a native carriage, except in imitation of Europeans, we must go to the sculptures on ancient temples in Java, where they are thus represented.

In two islands only of the Archipelago is the horse found in the wild state, *Celebes* and *Luzon*, the only ones that are known to have extensive grassy plains fit for its pasture, and in these it is caught by the lasso and broke in, as in the Llanos of America. In such situations it is certainly far more likely to have become wild from the domestic state than to be indigenous. In so far as Celebes is concerned, this view is rendered probable by the name being a corruption to the Javanese from one language of that island, the *Wugi*; while in another, the *Macassar*, the horse is called the 'buffalo' of Java. In the Philippines it is not even alleged that the wild horses are anything else than domesticated ones become so. In Pigafetta's enumeration of the domestic animals of Cebu, he makes no mention of the horse. In the city of Manila, a pair of good riding horses cost from 100 to 120 dollars, and a pair of carriage horses from 120 to 130. Of course they are much cheaper in the provinces where they are reared. The horses of Sumbawa, Celebes, and Sumba are largely exported to Java, to the British settlements in the Straits of Malacca, and even as far as the Mauritius. In Batavia, a good Bhima or Batak horse is worth from £10 to £15.

The *Barb*, so famed in Europe, was never brought to India; reared by the Moors of Barbary and Morocco, during their dominion in that country,

the barb was introduced into Spain, where, however, it has been suffered to degenerate greatly since their expulsion. The noble barbs are of rare occurrence even in their own country. The common horse of Barbary is a very inferior animal. In the beauty and symmetry of their forms, however, even the barbs are far from excelling; their valuable qualities—and in these they are perhaps unequalled by any other breed in existence—are unrivalled speed, surprising bottom, abstinence, patience, and endurance under fatigue, and gentleness of temper.

Arabian horses are now-a-days comparatively little seen in India. A larger horse, with greater power, has been needed, to meet the wants of the British Government for its heavier ordnance and heavier soldiers, and for the larger carriages now in use by Europeans and the wealthier natives. Also, the prices demanded for the Arab horses are beyond the means of ordinary purchasers, and the Arab never was in great request in India, except as a riding horse. The chief, Abd-el-Kadir, speaking of Arab horses, said, 'A thoroughbred horse is one that has three things long, three things short, three things broad, and three things clean. The three things long are the ears, the neck, and the fore legs; the three things short are the dock, the hind legs, and the back; the three things broad are the forehead, the chest, and the croup; the three things clean are the skin, the eyes, and the hoof. He ought to have the withers high and the flanks hollow, and without any superfluous flesh.' These are very nearly the words which writers use in describing perfection in horses, and in these matters, therefore, they seem to have borrowed their ideas from Arabian writers.

The best Arab horses are bred in the desert by the Anazah tribe, in whose territory, before the conquest of the Wahabees, the district of Nejd was included, where the richest pasture of Arabia is found. That name, in India, used to procure a high price at all times for a horse. The Anazah is one of the largest and most extensively subdivided of the Bedouin tribes. They have the best horses. They visit Nejd as well as Syria. Some of the Anazah Arabs have a great prominence in the foreheads. The marks at the base of the ears of the Anazah and other horses, have their origin in the custom of the Bedouin, of stitching the new-born foal's ears together, to make them take what is thought the proper shape. Purveyors of the Indian market, knowing that the Indian purchasers look for such marks, frequently counterfeit them on the baser born breeds which they buy for India, by branding them in the right place with the firing-iron.

In the Arab horse, says Colonel Shakespeare, the favourite colours in India are greys of kinds. The nila, i.e. a grey with a blue skin, is generally more hardy than the sabza, a grey with a light-coloured skin, and the feet of the nila are more generally black than the sabza. The other colours are bay and brown of different shades, and chestnuts. Black is very rare. Arab roans are common. The high-caste Arab is phlegmatic and wearisome to ride when unexcited; trips in his walk, and does not step out; but when roused by emulation in the hunt or race, will go at full speed over rock and stone, when the soil is not visible, or up and down the sides of a precipice, and, if properly handled, never make a mistake.

The Arab people do not keep any long pedigrees of their thoroughbred horses. The certificates which they furnish merely give the names of the clans, under the assumption that the purity of blood is notorious throughout the tribe. Of all their domestic animals, Arabs put the greatest value on their horses.

The time to see the horses and horsemen of Damascus in their glory, is about sunset on the Merj and the neighbouring road, where they are regularly exercised. If the master does not ride, a groom is sent out, and the young foals gambol loose by their dam's side, till they are old enough to be ridden, which is at an early age. Their education begins often with learning the rahwan pace, which is much esteemed. It is generally taught by tying the feet on the right and left side together, each to each,—the right front to the right hind, and so with the left. An animal who excels in this kind of amble is worth a large sum, be he ever so ill-bred or poor in appearance. The value of the accomplishment lies in its comfort to rider and ridden, for so smooth is the pace, that a brimming cup of water may be held at full speed without spilling; and so easy is it for the horse, that a well-trained one is supposed to cover the distance between Damascus and Beyrout in eight or nine hours. When we consider that the actual length of road is 72 miles, twice ascending and descending several thousand feet in crossing the ranges of Lebanon and Anti-Lebanon, the performance is certainly creditable.

The pedigree of one of their horses of the blue blood is as well known throughout the districts traversed by the tribe he belongs to, as that of any royal family of Europe. The Bedouins of Syria have five principal breeds, known as the Khamsa, or five,—(1) The Kehilan (fem. Kchileh or Kehilet) is the fastest, but not the hardest. They are bred chiefly by the Bedouins settled between Basra, Merdin, and Syria. That of Dajulfa seems to be the most numerous. They are highly esteemed, and consequently are very dear. (2) The Seglavi (fem. Seglawieh), of which the Seglavi Jelran is considered the best in all the desert. (3) Abeyan (fem. Abeyeh) is a small, but generally the handsomest breed. (4) The Hamdani (fem. Hamdanich), not a common breed. (5) The Hadban (fem. Hadbeh), not common.

Mr. Robinson says these five principal races diverge into many ramifications. Every mare particularly swift and handsome, belonging to any one of the chief races, may give origin to a new breed, the descendants of which are called after her, so that the names of different Arab breeds in the desert are innumerable. The horses of the Bedouin of Syria are mostly small, seldom exceeding fourteen hands. They ride, almost exclusively, their mares, having the advantage over the horses in speed and good temper. The latter they sell to the town's people, or to the fellahs. They object to them, not only because they are more vicious than the mares, but because they neigh, which in an expedition by night might be the means of betraying them. They are first mounted after the second year, from which time the saddle is seldom taken off their backs. They are kept in the open air during the whole year, never entering the tent, even in the rainy season. In summer they stand exposed to the mid-day sun. In winter a sack-cloth is thrown over the saddle. Like his master,

with very little attention to his health, he is seldom ill. Burning is the most general remedy, and as this is done with a hot iron, it has given rise to the erroneous notion that the Arabs mark all their horses.

More than half of the Arab horses exported to Bombay are shipped from the seaport of Koweyt. Palgrave says they are generally brought from the north of Arabia or the Syrian desert. There are good horses of this kind at Hayel and Jabl Shomer. Those of Shomer or Anazah breed are high blooded, and often very perfect in all their points. The best of the Nejd horses are small, few reaching fifteen hands, and fourteen being about the average, but their small stature is not observed in their excellent shape. The genuine Nejd breed is obtainable only in Nejd; and the distinctive points of the Nejd horse are, the full rounded haunch, the slope of the shoulder, and the extreme cleanliness of the shank. In Nejd breeding, care is taken to select a good stallion and good mare. The total number is about 5000; and horses are kept only for war or parade, all travelling and other drudgery being performed on camels, or on asses. The Nejd horses are esteemed for their great speed and endurance; and in the latter quality, indeed, they are unequalled, bearing up through abstinence and labour for 48 hours, under an Arab sky. They are often ridden without bit or bridle, saddle, rein, or stirrup, but they yield to the pressure of the knee or thigh, and to the voice; can be wheeled and turned and brought to a dead stand in mid career of full gallop. Mares are never parted with, and good stallions rarely so. Those of Hayel and Jabl Shomer are a fine breed, and horses from them often find their way to Europe, where they are sold at high prices. These are generally the produce of a Jabl Shomer mare with Nejd stallion, or the reverse. Their height varies from 14 to over 16 hands; but their shape is less elegant than the Nejd, and often indicates some defect, such as a heavy shoulder, small rump, shelly or contracted hoof, or small eye.

To the east and south of Towcyk, the Arab horse loses in beauty and perfection, in size and strength; and in Oman they resemble the tattu of India.

In the south of Arabia, the horses are mere rats, short and stunted, ragged and fleshless, with rough coats and a slouching walk, but with fine snake-like head, ears like reeds, wide and projecting nostrils, large eyes, fiery and soft alternately, broad brow, deep base of skull, wide chest, crooked tail, limbs padded with muscle, and long elastic pasterns. It was told to Captain Burton (*Pilgrimage*, iii. p. 269) that the Zu Mahomed and the Zu Husayan, sub-families of the Beni Yam, a large tribe living around and north of Sanaa in Yemen, have a fine large breed, called El Jaufi, and that the clan El Aulaki rear animals celebrated for swiftness and endurance. The other races are stunted; and some Arabs declare that the air of Yemen causes degeneracy in the first generation. In Solomon's time the Egyptian horse cost 150 silver shekels, which, if the greater shekel be meant, would still be about the average price, £18; and Wellsted tells us (i. p. 306) that several of the Imam's horses in his time were of the noblest breed in Nejd, some of his mares being valued at from 1500 to 2000 dollars.

Persia.—The *Bakhtiari* have a hardy race of

horses, of a middle stature, about the usual size of the Arab horse, and a good deal of the blood of the latter runs in their veins. They are exceedingly fleet, sure-footed, and soft-mouthed, very manageable also, and capable of climbing up mountains with the agility and fearlessness of mountain goats. Among the richer *Bakhtiari* are many *Chab-Arab* horses, which are taller than the *Nejd-Arab*, and resemble more those of the island of Bahrein. The *Chab-Arab* horse is justly prized in Persia; and Baron de Bode never witnessed a greater display of beautiful Arab blood horses, than on the plains of Mal-Amir, at the camp of the *Bakhtiari* chief, Muhammad Taghi-Khan, for at the court of the Shah of Persia the Turkoman horses are preferred to the Arab; and among the former, the Tekko breed is the most esteemed for its size, power, and faculties of endurance.

Arabian horses are not very common in the north of Persia; but the breed between them and a Persian mare is all elegance and elasticity, being of a rather stronger mould than the Arab of Nejd, the best race of the country. The Persian horses never exceed 14 or 14½ hands, yet certainly on the whole are taller than the Arabs, and have been much improved of late. Although neither so swift nor so beautiful as those of Arabia, they are larger, more powerful, and, all things considered, better calculated for cavalry. Of the several breeds of horses in use in Persia, the most valuable is that called the Turkoman. In the eyes of an English jockey, however, these horses would hardly seem to possess a single good point. They are from 14½ to 16 hands high, have long legs and little bone under the knee, spare carcasses, and large heads. But what renders the Turkoman horses so valuable to the natives, is their size and extraordinary powers of supporting fatigue; for they have been known to travel 900 miles in 11 successive days. The Arabian blood has also been introduced into Persia, and some horses bred in Dashtistan, in point of speed and symmetry, emulate the most admired coursers of Nejd. Their usual food is chopped straw and barley; the bed is made of dung, which is dried and beat into powder, and regularly every morning exposed to the sun. No people are fonder or take more care of their horses than the Persians. They are clothed with the greatest attention, according to the climate and season of the year, and in the warm weather are put into the stable during the day, but taken out at night. The horses in Persia are not so subject to internal disorders as in England, but their heels are invariably contracted, from badness of shoeing.

Persian horses brought to Bombay from Basrah and Bushahr, and those bred on the shores of the Gulf, are in use with the British Government, and some are of great power, strong, and enduring. The Gulf horses are out of Persian mares by Arab horses.

Turkoman horses, of excellent breed, are found amongst the Turkomans, who export the finest to Afghanistan, Persia, and India. The Akhal and Yomut horse is little inferior to the Arab in swiftness, endurance, and beauty of form. The Turkoman horse is a fine animal, between fifteen and sixteen hands high. He is bred from the Arabian, but the cross of the breed of the country, and the fine pasture, have given him great size and strength. There are probably no horses in

the world that can endure so much fatigue. Sir J. Malcolm ascertained, after minute examination of the fact, that the small parties of Turkoman who ventured several hundred miles into Persia, used both to advance and retreat at the average of nearly one hundred miles a-day. They train their horses for these expeditions as sportsmen train for a race; and the expression they use to describe a horse in condition for a chapao or forage is, that 'his flesh is marble.' The Turkoman horse stands high, and the reports as to his feats show him to be a very superior animal, but they are almost unknown in India.

The Turkoman horse around the Hindu Kush is carefully reared. It is a large bony animal, more remarkable for strength and bottom than symmetry and beauty. Its crest is nobly erect; its head is not so small, or its coat so sleek, as the brood of Arabia, and the length of its body is greater. They will perform six hundred miles in 7 or even 6 days. Those that reach India are reared about Balkh, and Andkhu, and Maimana.

The horses of the *Turko-Tartar* races are,—

The Turkoman horse, or Argomak, chiefly in the western and southern parts of the khanate.

The Uzbek horse, more especially in the north of Bokhara, and in Miankale; and lastly,

The Khokand horse, in the neighbourhood of Samarcand and the east of it. There are two more, which are, however, inferior to the former; these breeds are the following,—the Kirghiz horse and the Karab Airi, the latter being a cross-breed from the Turkoman stallion and an Uzbek mare, and *vice versa*. All these breeds differ from each other by their coat, as well as by other qualities.

The Argomak is usually tall, well-shaped, with slender legs and a swan-like neck, carrying its head proudly and with ease aloft. But its great beauty consists in the peculiar lustre of its coat, which is especially observable in the bay-coloured Argomak. Their defects are, a narrow chest, and a scanty tail and mane, in addition to which, some have the defect of being saddle-backed. These defects incapacitate the Argomak for undertaking long journeys; and it would be above all things unadvisable to make use of them in travelling over the steppes of the Kirghiz, because they are so much spoiled by the excessive care which is taken of them, that they are almost incapable of finding food for themselves, not only in winter, but even in summer.

The Uzbek horses, which are smaller than the Argomak, and inferior to them in point of external beauty, have nevertheless many redeeming qualities, of which the principal is their strength. Some of their defects arise in consequence of their being badly broken in by the Uzbaks. With these horses the pace is neither a walk nor a proper trot, but what the Cossacks term a grana or short trot. Baron de Bode here seems to mean the amble. The second defect is that the Uzbaks never geld their horses, which renders it impossible to picket them together, but each horse is obliged to be attached to a separate stake,—a circumstance which, although trivial at first sight, is one of the reasons why the Uzbek camps take so much room, and are therefore more exposed to sudden attacks.

The strongest race of the *Turko-Tartar* horses is undoubtedly that of *Khokand*; hence they are usually employed by carriers for transporting goods

from one place to another. Five batman is the usual weight of a loaded cart, although they increase the weight sometimes to seven and eight batman from Bokhara to Samarcand. The power of these horses becomes still more apparent when they are used as pack horses. Baron de Bode had seen a horse loaded with two large tents, some kettles flung over the back, and a man sitting astride. It accompanied him in this fashion the whole way from Samarcand to Karshi, and from thence to Bokhara.

The *Karab-airi* is a very handsome race of horses, in size equal to the Uzbek horse, but in the shape of the head and legs resembling the Argomak. They are reckoned good racing horses in Bokhara, but as they are trained for the game of kukhari, in which, after running a certain distance, the riders rest, these horses cannot hold out a protracted race, especially as they exhaust their strength from the very outset.

The horses of the *Kirghiz Kazak* are trained to run races, in distances sometimes from twenty-five and thirty to forty and fifty versts. Every Kirghiz, in setting out on a journey, fastens to his saddle a bag of kurut or curd made from sour milk. He soaks some of it in water, and thus appeases his hunger and thirst together.

Two wild horses are found in the Russian steppes, the *Tarpan* and the *Musin*. The latter is supposed to be a steppe horse run wild; but the younger Gmelin, Pallas, and Middendorff think that the tarpan is a descendant of the pristine wild stock. Darwin and Wallace, however, are of opinion that the tarpan also is a steppe horse run wild.—*Rollleston*, p. 50.

The *Muss* of the Kirghiz is the wild horse of the Asiatic plains. This animal is not like the wild horse of S. America, which undoubtedly sprang from those taken into the country by the Spaniards. He is of a distinct race from the Asiatic horse, very small (not so large as an ass), beautiful in form, having a small head and short ears, and varying in colour from black, bay, grey, and white, the latter being the most rare. His sense of smell is very acute, which renders him most difficult to approach. He is exceedingly fleet, and few horses can run him down. In hunting him, a great number of Kirghiz assemble, and when the scouts have found the herd, the horsemen form an extended line at a considerable distance towards the steppe. When so much has been accomplished, they gradually ride up, forcing the herd towards a pass in the mountains. As they approach near to the ravine, the hunters draw closer, forming a crescent, and proceed with extreme caution till the stallions enter the pass. While this has been going on, another party of hunters have made their way into the pass, taking their stand in the narrowest part, and waiting till the herd appears. Having signalled to the hunters on the plain that the pass is secured, the whole body close up, and the wild animals are in a trap. They are now driven onward till stopped by the hunters above, when the work of slaughter begins, and vast numbers of these beautiful creatures are killed by their battle-axes. The Kirghiz consider their flesh the greatest delicacy the steppe affords.

Dr. Jerdon, however, says wild horses of a truly feral type are at present unknown. The *Gor Khar*, *Equus onager*, *Pallas*, is the wild ass of Cutch; the *Kyang* or *Dzighai*, or wild ass of Tibet, is

Equus hemionus, *Pallas*; the *E. hemippus*, *Is. Geoffroy*, which inhabits Syria, Mesopotamia, N. Arabia, is the wild ass of Scripture; and *E. asinus* is of N.E. Africa and S. Arabia.

Since 1840, British India has received small batches from the Cape of Good Hope, of good figure and good temper, suitable for riding horses and for draught, but, like the Arab horse, higher priced than can easily be afforded. Australia has since taken a hold on the Madras and Calcutta markets, and its imports are termed *Walers*. What number of new horses of all sorts are needed for British India annually, is not known. The imports have been—

Australia. Other Places.		Australia. Other Places.	
1874-75,	2072	476	Rs. 5,29,270
1875-76,	2075	175	Rs. 1,44,325
1876-77,	2355	507	7,06,850
1877-78,	1938	487	37,025
1878-79,	2079	1271	7,25,700
1879-80,	2133	1473	1,13,550
			5,99,000
			2,32,820
			7,07,300
			5,50,525
			6,89,600
			4,78,350

—*Huc and Gabet*, p. 229; *Yule's Cathay*, i. p. 143; *Darwin, Animals and Plants*; *Tod's Rajasthan*, ii. pp. 162, 227; *Powell*; *Geard's Koonawur*, p. 112; *Adams*, p. 269; *Hooker, Him. Jour.* i. p. 118, ii. p. 131; *Williams' Middle Kingdom*; *Crawford, Eng. Cyc.* p. 383; *Skinner's Journey*, ii. p. 70; *Niebuhr's Travels*, ii. p. 301; *Shakespeare's Wild Sports*; *Palgrave*, i. ii. p. 97; *Robinson's Tr.* ii. pp. 167, 356; *Wellsted's Tr.* i. p. 306; *Kinnaird's Persian Empire*, p. 38; *Malcolm's Persia*, ii. p. 241; *De Bode's Bokhara*, p. 198; *Vigne's Personal Narrative*, p. 455; *Atkinson, Amours*, p. 326; *Porter*, ii. p. 536; *Gray*.

HORSE CHESNUT, *Æsculus hippocastanum*. An Asiatic tree, long planted for shade and ornament on the Continent and in Britain. The wood is soft, and not durable. The fruits are used in Switzerland and Turkey for feeding sheep, horses, etc.

HORSE - FLY, *Hippobosca equina*, *Linn.*, attacks horses and man. Its bite, like the scorpion sting, affects individuals variously.

HORSE GRAM, *Dolichos uniflorus*. This pulse, Madras gram, is largely used in the Peninsula of India for feeding horses. In Northern India, Chenna, or Bengal gram, *Cicer arietinum*, is the pulse used. The composition of horse gram in 100 parts is,—moisture, 11.40; nitrogenous matter, 23.25; starchy matter, 61.43; fatty or oily matter, 0.81; ash, 3.10.

HORSE HIDE is tanned and curried for harness work, for collars, etc. It has of late years been substituted for seal-skin, but does not produce so good a leather. Enamelled horse hide, split or shaved thin, is used for ladies' shoes, in imitation of seal.

HORSE LEECH is the *Shwui-chih* and *Mah-wang* of the Chinese. Horse-mango, *Mangifera foetida*. Horse-almond, *Sterculia foetida*. Horse-cassia, *Cathartocarpus Javanicus*. Horse-cat, civet.

HORSE-RADISH, *Lah-kan*, *CHIN*.

Peberrod, . . .	DAN.	Raphanus rusticus, LAT.
Rammenas, . . .	DUT.	Rabao de Cavallo, . . .
Rava, Ralfort, . . .	FR.	Khren, . . .
Cran de Bretange, . . .	FR.	Rabano, Picante, . . .
Meer-settij, . . .	GER.	Pepparrot, . . .
Rafano, . . .	IT.	Sw.

The *Cochlearia armoracia*, *Linn.*, a perennial plant, common in moist places of Europe, and grown in India. Its root is used as a condiment, and is, besides, an article of the materia medica.

HORSE-RADISH TREE.

Hub-ul-ban (seeds), ARAB.	Hyperanthera moringa, L.
Sujna, BENG.	Sagul, MAHR.
Sohunjana, DUKH.	Moriaben, PERS.
Munga-ke-jhar-ki-jar, HIN.	Sigumalla sohanjana, SA.
Sagul-ke-jhar-ki-jur, . . .	Muranghai ver, . . . TAM.
Moringa pterygoasperma, L.	Munaga veru, . . . TEL.

This tree grows easily from seeds, in gardens, only requiring watering for the first few months. The scraped roots are very like horse-radish, and are served up as a substitute. The long pods are boiled and used as a vegetable, also made into curry. The flowers and leaves are used as a vegetable, and its gum is used medicinally.—*Faulkner*.

HORSE TAIL. The tails of the horse and of the yak are used as standards. *Tupha*, *Tugh*, or *Tau*, according to *Remusat*, is the Turki name of the horse-tail standard, but is applied also by the Chinese to the yak tail, which, respectively with those nations, mark the supreme military command.

—*Rech. sur les langues Tartares*, p. 303; *D'Osson*, i. p. 40, in *Yule, Cathay*, i. p. clxxiv.

HORSFIELD. Dr. Thomas Horsfield and Mr. Moore's Catalogue of Birds, in the India House Museum, appeared in 1856 and 1858. Dr. Horsfield was one of the earliest naturalists labouring in the East Indies, though the extent of his labours in Java and Sumatra is but little known. His researches in Java and the neighbouring islands began in 1802, and were continued till 1819. During that time he collected upwards of two thousand species, the most copious and interesting of which have been published by Messrs. Brown and Bennett in the *Plantæ Javanicæ Rariores*, one of the most profound and accurate botanical works, and one most important for the Indian botanist to study with attention. He wrote *Zoological Researches in Java and the Neighbouring islands*, 1824; *Descriptive Catalogue of the Lepidopterous Insects in the Museum of the East India Company*, 1828-9; with Bennett and Brown, *Plantæ Javanicæ Rariores, descriptæ Iconibusque illustratæ*, 1838-44; and an *Essay on the Cultivation and Manufacture of Tea in Java*, 1841.

HORTON PLAIN, a few miles from Newara Elia, in Ceylon, is the highest table-land in that island. The pitcher plant, *Nepenthes distillatoria*, grows in great luxuriance on it.

HORTUS MALABARICUS, a botanical work undertaken at the suggestion of Henry van Rheede, a Dutch Governor of Malabar. The specimens were collected in 1674 and 1675 by Brahmans, and sent to Cochin, where drawings of them were executed by Mathæus, a Carmelite missionary; corresponding descriptions were at the same time made in the Malabar language, which were afterwards translated into Portuguese by Emanuel Carneiro, a Cochin interpreter, and from that into Latin by Hermann van Douep, the secretary to the city of Cochin; the whole was under the superintendence of Cascaius, a missionary there. The work was at length published at Amsterdam between 1686 and 1703, in 12 volumes folio, with 794 plates, and was edited by Commelyn, who has occasionally added remarks on the plants.—*Wight's Prod.* i. p. 7.

HORUS, a god of the Egyptians. One of the most remarkable fictions in the Egyptian and Syrian mythologies, is that of the annual disappearance and resurrection of Horus, or the solar Osiris, and the lamentations for Adonis and the

joy at his restoration. These, as well as the Deot'han of India, bear evident reference to the sun's annual motion.—*Elliot, Supp. Gloss.*

HOSHANGABAD, a town in the Central Provinces of India, in the Sagur and Nerbadda territories, lat. $20^{\circ} 45' 30''$ N., and long. $77^{\circ} 46' E.$, its district forming a portion of the Nerbadda valley, lying entirely on the left bank of the river, and including some large tracts in the Satpura Hills. The district is bounded on the north by the territories of Bhopal, Sindia, and Holkar, from which it is separated by the Nerbadda, the Central Provinces lying between lat. $21^{\circ} 40'$ and $22^{\circ} 59' N.$, and long. $76^{\circ} 38' 30''$ and $78^{\circ} 45' 30'' E.$ Population in 1872, 440,186; area (1877), 4376 square miles. Four Gond rajahs, in 1870, held the eastern portion of the district. The aboriginal tribes number 89,029; Hindus, 364,676; Mahomedans, 21,765; Buddhists and Jains, 1132. The most numerous of the aboriginal tribes are the Gond (57,946 in 1872), and Kurku (19,295); the remainder consisting of Bharia, Maria, etc. Among the Hindus, the Brahmans in 1872 numbered 25,393, and the Rajputs, 28,689; the mass of the Hindu population consisting of Dhers or Dhars, 39,173; Kunbis, 17,215; Lodhis, 13,323; Gujars, 24,759; Chamars, 15,117, and others inferior castes.—*Imp. Gaz.*

HOSHIARPUR, in lat. $31^{\circ} 32' 13'' N.$, long. $75^{\circ} 57' 17'' E.$, a large civil and military station, in the Panjab, N. of Ludhiana, 1066 feet above the sea. It gives its name to a British revenue district, lying between lat. $30^{\circ} 58'$ and $32^{\circ} 5' N.$, and between long. $75^{\circ} 81'$ and $76^{\circ} 41' 15'' E.$ Area, 2086 square miles, pop. (1868) 938,890. Brahmans numbered 76,821; Rajputs, 47,464; Kahatriyas, 21,784; Banya, 1493; Arora, 386; Jat, 112,789; Gujar, 21,543; 3977 Sayyids, 843 Moghuls, 8733 Pathans, 145 Baluch, 37,522 Mahomedan Rajputs, 31,262 Jats, and 45,893 Gujars. The Jats form the most numerous tribe in the district, composing 42 per cent. of the proprietary body, and paying 38 per cent. of the land revenue.—*Imp. Gaz.*

HOSPITAL. There was an hospital at Rai and another at Baghdad, of which Rhazes, A.D. 923 or 932, was the superintendent; and about the same time, between A.D. 905 and 920, the first European hospital was founded by the Saracens at Salerno in Italy. Hospitals existed in China during the Sung dynasty, between A.D. 960 and 1278. The pinjrapol of Bombay and of Surat are hospitals for sick and lame animals, established by Hindus. The East India Company established many civil hospitals throughout India, and Hindu and Native States have followed in this line.

HOTA, SANSK., or Hotri, the priest who directs the Homa or burnt-offering, from Hu, SANSK. to offer. The Hota pours the clarified butter on the fire in the burnt-offering, repeating the proper formulas. Hutsava or fire-food is the name of the oblation.—*Ward's Hindoos; Wilson, Glossary.*

HO-TSING, the artesian fire-springs of the Chinese, which are sunk to obtain a carburetted hydrogen gas for salt-boiling, far exceed the European artesian springs in depth. These fire-springs are very commonly more than 2000 feet deep; and a spring of continued flow was found to be 3197 feet deep. This natural gas has been used in the Chinese province Sze-chuen for several thousand years; and portable gas, in bamboo

canes, has for ages been used in the city of Khiung-tschou. More recently, in the village of Fredonia, in the United States, such gas has been used both for cooking and for illumination.—*Curiosities of Science*, p. 118; *Imbert*.

HOT SPRINGS and sulphurous springs are numerous on the shores of the Dead Sea, and also in its basin, and in other parts of the Jordan valley. The hot springs of Callirhoe were the favourite resort of Herod. There are others at Um Keis (Gadara), where are the ruins of baths; and the hot springs of Tiberias have been famous ever since the time of Joshua (B.C. 1426), when they gave name to the place. Most of these are strongly mineral. The hot water of Elisha's Fountain is sweet.

The hot springs of Boshier and Ghullas in Oman are inland from Muttra, situated at the foot of rocks. Their temperature ranges from 83° to 112° .

Hot springs occur also at Maculla in Arabia, likewise $\frac{1}{2}$ miles inland from Muscat.

In Shoa, hot springs occur at the village of Gossamee in Morabeitee; at Kowut, in the province of Gidem; at Korari, about 10 miles S.E. of Alioamba; at Makfood, in the bed of the Jowahah river; at Metak, about 3 miles S. of Ankober; at Finfinni, in the Germama plain; in the bed of the river Kassam, in the district of Aden, and in the neighbourhood of the extinct volcano of Fontali.

Hot springs occur at Jumnotri, Gungootri, Kedarnath, and Badrinath, in Garhwal; also near Nutpa, Bukti, and Jauri, in the valley of Sutlej (Gerard), opposite Soni banks of Sutlej (Prinsep). Hot spring at Silol, Kangra (G. T. Survey). Kulat in Kullu (Gerard). Munnikarn, in Kullu, and a hot spring farther up the Parbati. Mr. Edgeworth informs us that the water where it issues from its source is of the temperature of 207° Fahr. It is therefore one of the hottest known springs. Some of the hottest of these are the Geysers 180° , Surajkund 190° , the Petersquelle in the Caucasus 195° , spring on Paluk river 196° , and what Humboldt discovered and describes as the hottest spring in the world, Guanaxuata in Mexico, 207° . The boiling point of water at the elevation of Munnikarn is much below that point. Rice is cooked in the spring at Jumnotri 194° , at about 11,000 feet above the sea, and in many others of inferior temperature. Munnikarn is on the right bank of the Parbati (or Parub) river. There is a large village here, and high mountains covered with snow environ the place. There are several hot springs, three or four of which boil furiously. The latter issue out of rock near the edge of the river, and dense steam rises out of them in considerable volumes, heating the air all round, absolutely darkening the path for a few yards, and the heat is very distressing. All the inhabitants of Munnikarn cook their food in these boiling springs, and wood is never used by them for culinary purposes.

In Ladakh many hot springs occur, but the best known are those of Nubra, Puga, and Chushul; the two first have clear water, and a temperature of 167° , with beds of soda below the springs. Those at Puga occur in the bed of a rivulet, where they bubble out at temperatures from 80° to 140° . The hottest contain chloride of sodium and sulphuretted hydrogen in solution; and those of low temperature chloride and borate of sodium.

HOT SPRINGS.

The hot spring of Chushul has a temperature of 96°, without taste or smell, but is said to have medicinal properties.

A hot spring occurs at Behitsil in the Basha valley in Little Tibet, from which a deposit of sulphur occurs. Two hot springs, sulphureous and chalybeate, also occur near the village of Duchin, in Little Tibet. The temperature of one visited by Mr. Vigne was 154° Fahr. One occurs 12 miles east of Rajawur, the temperature about 140°. It is sulphureous, and deposits sulphur in its course.

Between U and Tsang, in Tibet, are some hot springs, which are also numerous in the mountains lying east of the Ma-p'ham lake, and at one place hot water is thrown twelve feet high. Hot springs issue from the flats near a stream at Chung-leng, 16,170 feet above the sea, the temperature 122° to 130°. The hot springs of India are resorted to by the people for the cure of lingering ailments.

The hot spring at Ab-i-Garm at Chitral, in Afghanistan, is also called Talab-i-Nil, also Chhattiboi. Lower range of Suliman mountains.

In Baluchistan a hot spring occurs at Basman, in the Kohistan of Baluchistan, 44 miles N.W. of Banpur. Lieutenant Pottinger halted at Basman, and found the hot well upwards of twelve yards in circumference, and two or three feet in depth; in the centre of it was a circular pipe built of red burnt brick, about eight inches in diameter, and within as many of being level with the water, which boiled out of it as thick as a man's thigh, with considerable violence, and at noon so heated that he could not venture to put his hand into the ebullition. One side of the well had been gradually worn away by the incessant gushing of water over it, and thence a limpid brook flows past the village, and suffices the husbandmen for the irrigation of their grounds. He bathed in this stream about five yards from its source, and found the water pleasantly tepid, with a strong sulphureous smell and taste, which unfit it for culinary purposes; but the Baluchi regard it as aperient in its effects, and an excellent specific in cutaneous disorders.

Pir Muggen, Alligator Tank, is 13 miles from Kurachee (Carless). Juggen and Deyrah, N. Sind (Kirk). Springs at the base of the Halla mountains, Sind (A. Young).

The following means of temperature of the hot springs at Pir Mangal, or Munga, or Mungear, were taken in September 1844 by Major Baker and Lieutenant MacLagan:—

1st spring, 4th Sept.,	11.30 A.M.,	Water, 119°	Air, 89° 25°
" "	4.45 P.M.,	" 118° 29°	" 86°
" "	9.5 P.M.,	" 117°	" 80°
" 5th Sept.,	5.45 A.M.,	" 119°	" 78°
" "	9.5 A.M.,	" 119°	" 83°
2d spring, 4th Sept.,	11.45 A.M.,	" 127° 5°	" 91°
" "	4.55 P.M.,	" 126° 25°	" 86° 5°
" "	9.25 P.M.,	" 126° 05°	" 80°
" "	5.50 A.M.,	" 128° 25°	" 78°
" 5th Sept.,	9.15 A.M.,	" 128°	" 83°

3d and principal spring, which is the saint's shrine, and which feeds the Alligator Ponds.

4th Sept., 5.30 P.M., . . . Water, 99° Air, 85° 5°

The water of these springs, where it first issues, has a slightly sulphureous smell and taste, but, after a short exposure to the air, becomes perfectly sweet and pure; it leaves a slightly blackish deposit on the pebbles. The rocks in the vicinity

HOT SPRINGS.

consist of an upper cap of coarse limestone, overlying coarse soft sandstone.

The other hot springs of Sind are the Lukki and Gazi Pir springs. Of the latter, Lieutenant MacLagan gave the following account:—'There is a hot spring on a considerable elevated plateau upon the hill called Bhil, above Gazi Pir, a saint's shrine, a few miles west of Shah Hasan, on the Meunchar Lake. I could not hold my hand in the spring for any length of time. The water fills a small reservoir under a clump of trees, then escapes in a narrow stream which flows along to the edge of the plateau, and throws itself over the rock in a white cascade.' The sulphur springs near the village of Lukki, like the springs at Mangal Pir, are three in number, but are much more highly impregnated with sulphur, though their temperature, as under, is not so great,—

1st spring, at 12 A.M., water 102° Fahr.; air in the shade, 82° Fahr.

2d spring, at 12.12 A.M., water 103° Fahr.; air in sun, 86° Fahr.

3d spring, at 2 P.M., water 105°, in shade 68° Fahr.

Water boiled at third spring by thermometer at 212° 75°, and at Kurachee by same thermometer at 214°; difference, 1° 25°.

At Devaki Unei is 50 miles S.E. from Surat, at the foot of some hills, the temperature being 111° to 120°.

One at Oonai or Oonari, in the jungle between Bansda and Boharee, in Gujerat, has a temperature of 120° to 124°; but it is said to vary at seasons (Dr. A. Gibson). Oonai is a small hamlet in the territory of the raja of Bansda, near the hills east of the Surat district. Also one at Toocce, near Rutenpur, on the Mhye river, in Gujerat, between lat. 22° 49' N., and long. 73° 30' E. There is a sulphureous hot spring at Tulsiran, in the centre of Geer, in Kattyawar.

A line of thermal springs traverses the Southern Konkan; and there are hot wells at Vejrabhoy, 48 miles N. of Bombay.

Hot springs occur between Dasgaon and Southern Rajapur, between the Ghats and the sea, generally from 16 to 24 miles inland from the sea. At Rajapur there is one spring; near Mhar, on the Bancoot or Fort Victoria river, 75 miles S. of Bombay, there are several, their temperatures being 98°, 105°, and 109°. They are midway between Dasgaon and Mhar, and about 75 yards from the river.

There are ten places with hot spring between Rajapur and Saksee, viz. in the Viziadrug taluk, village Oonglee (Oonale) near Rajpur, about 20 miles from the Ghats and 12 miles from the sea. It is largely used. There are three in the taluk Ratnagherry and in the mahal Sangameshwar, at the villages Rajwari, Tooril, and Sungmairi, about 14 to 16 miles from the Ghats and 26 miles from the sea. That at Tooril is exceedingly hot. One at the village Arowli, in the Konedewri mahal; one said to increase the appetite, at the village of Mat in the Hatkumbe mahal. Three at Oonari village in the Severndrug taluk and the Natee Palwan mahal. One at the village Oonari, in the Jafferabad mahal. One at the village of Savi, in the Ryeghur taluk and Mhar pargana, between Mhar and Dasgaon; and one at the village Oonari, taluk Sankse and Pali mahal. Oonali or Oonari is the Mahratta term for hot springs, which will explain why so many villages bear this name.

Hot springs, about 150 in number, occur near Wujerabae, in the Bhownday taluka of the Tanna

collectorate. The district in which they occur borders upon the river Tansa, on the Dugand side of the Bhownday taluk, and is seemingly confined to the villages of Akulkolee, Ganeshpuri, Gorad, and Nimbawullee, in a tract about 3 miles long and a mile broad. The Argurd Kund spring which is the hottest, has a temperature of $130^{\circ}60'$. Hot springs, having a temperature of 87° , rise through the limestone near the Pindi hills, and globules of gas escape from round holes in the debris and mud covering the bottom of the ravine. About five miles north of the hot springs of Urjunah, and four miles south of those of Kair, sandstone caps a gently rising ground covered with basaltic soil. Near the last-mentioned town many hot springs rise in the argillaceous limestone, which has been remarkably broken up and altered by the globular basalt protruding through it in different places. The principal springs issue at the foot of the rising ground, where the rock is most remarkably altered. Their temperature (87°) was the same as that of Urjunah, on the other side of the Pindi Hills, and it did not vary during the hot and cold months of 1831 and 1833.

Hot springs occur in the Satpura Hills, at Nizardeo, also at its sister spring at Unabdeo, about 3 miles to the north of Adawad, right under the Satpura Hills. Here the hot water issues from an oblong aperture in what appears to be a solid block of masonry, forming the lower part of an old Hindu temple, and flows into a tank 25 feet square. Four miles west of the Unabdeo spring is another hot spring, called Ram talao, or Sunabdeo. It is in a narrow gorge or glen formed by two low projecting spurs of the Satpura; the temperature, 140° . It contains 8.4 per cent. of silica and iron. There is another hot spring at Nizardeo, at Wirwada.

Near Bagin river in Pana district, Bundelkhand (Franklin). Two hot springs in Alwar country, one 15 miles W. by S. from Alwar, one 20 miles N.E. of Jeypore (Capt. Bellew's Survey). Mineral springs at Machery? (Col. Tod). At Sitabari, in Harowtee; also cold springs (Col. Tod).

Birbhum.—Hot springs occur at Buklesur in Birbhum. There are about eight of these, each being enclosed by little walls of sandstone in the form of wells, and known by different names, taken from those of the Hindu gods. The spring that has the highest temperature is the Surajkund, in which, says a Hindu traveller, we could not dip our hand, and in which an egg may be boiled, but not rice, of which we threw in a handful to try the experiment. A few paces from the Surajkund is a cold spring. There are springs in the bed of the Paphara, the washer-of-sins. The water of the Satgunga has a milky whiteness, whence the origin of its name.

Conserve abound in the hot springs of Surajkund; and two species, one ochreous brown and the other green, occur on the margin of the tanks themselves, and in the hottest water; the brown is capable of bearing the greatest heat, and forms a belt in deeper water than the green. Both appear in broad luxuriant strata, wherever the temperature is cooled down to 168° , and as low as 90° .

The water of one hot spring at Pachete near the Damuda is 190° Fahr. in the cold weather. The spring is chalybeate. Hot springs near Monghir, on the Ganges, are known as the Seeta

Kund; temperature, 163° . Hot springs at Rishi Kondah and Bhimband, in the trap mountains of Rajmahal. A thermal spring occurs in trap rock between lat. 23° and 24° N., and long. 86° and 87° E.

Kaljhurni, Maharu, Hatbulleah, Noubhil, between Rajmahal and Suri (Sherwill). Lacarakunda, 21 miles S.W. of Suri, in Birbhum (Sherwill). Tantlooce, 16 miles N.W. of Suri, on Sidh nullah, (Sherwill). Springs at Katkamsandi, Old Benares road (Everest). Pinarkun, Ramgur (Breton). Paharpur, Kurruckpore Hills (Sherwill). Rajgir and Guriuk, N. by E. of Gyah (Sherwill). Utteer, 30 miles from Puri (Brander).

There are two warm springs in the bed of the Godavery, one in the middle of the river near Badrachellum, about one hundred miles west from Rajamundry. At Kair and Urjunah, Dekhan (Malcomson). At Byorah (Malcomson).

Bum Buklesir is a pretty and curious spot, easily accessible, in a well-cultivated country, with a little jungle to its south. It is one mile from the large town of Tantipara, on the banks of the Buklesir, a small nullah. There are five or six hot springs, the whole group called Bum Buklesir. The hot wells have been surrounded with masonry walls, and are immediately on the north or right bank of the nullah. There are numerous hot springs in the bed of the nullah, only to be seen in the dry season, giving out sulphuretted hydrogen, with which the air is tainted. Near the hot springs are several cold ones, all flowing from a tough gneiss rock. The hot and cold springs are only separated by a few feet from each other. The body of water ejected from the hottest well is very considerable, being about 120 cubic feet per minute; it runs from innumerable small orifices in an accumulation of mud and dirt, the rock being nowhere visible within the masonry of the tank. In the hottest water, 162° , a green shining conferva thrives. Another spring is 128° , and the coolest 83° . Some 300 or 400 feet from the bank of the river, among the dilapidated temples, there is a large built tank, which is supplied by two springs, one hot and the other cold, so that at one end the water is warm, at the other cold, and in the centre tepid. The stream of the nullah is about 50 yards across, with a brisk current, and it retains its heat below the springs for a considerable distance; its temperature was 83° in the month of December, when the temperature of the air was in the shade 77° . The sand of the stream some little way from the spring, and at the depth of six inches, is intolerably hot to the hand. Extending for about 200 yards along the right bank of the stream, are 320 small brick and mortar vihara or temples, built by various pilgrims, each containing a lingam or emblem of Mahadeo. Only one temple has any pretension to architectural elegance. Numerous attendant Brahmans, most unfortunate beggars, loiter about the temples, engaged in bathing in the hot stream, or watching the cremation of dead bodies, which operation is constantly being carried on. Tantipara is a fine substantial village, with most of its inhabitants engaged in preparing silk for the Calcutta market. There is an indigo factory, besides a police choki and abkari station. A short way off is the large town of Dobrajpore, offering a good market for English piece-goods, and producing a large supply of fish from its

numerous tanks. Between it and Bum Buklesir, and in the town of Dobrajpore, large naked and picturesque masses of granite and gneiss protrude through the soil, occupying altogether about a mile square. The scene is a very curious one. In the opposite direction, but farther away, is Nagpore, or Jye Nuggur, a large town; the greater part of it has gone to decay, as is shown by its falling mosques, half-filled and weed-choked masonry tanks, and ruined buildings which almost approach to palaces in extent. The famous Nagore wall or entrenchment extends in an irregular and broken figure round the town of Nagore, at a distance of about 4 miles; its length is about 32 miles. At Lakarakunda, about 5 miles off, is a warm spring, temperature 85°. Near the feeble stream which carries away its waters is a curious cut stone Hindu temple.

The hot springs of Momay (temp. 110°), at 16,000 feet, produce a golden-brown *Cenocoleus*, representing a small form of *C. cirrhosus*, and a very delicate *Sphærozyga*, an *Anabaina*, and *Tolypothrix*; and at 17,000 feet, a delicate green *Conferva*, with long even articulations. With the latter is an *Odontidium*, allied to or identical with *O. turgidulum*; and with the former a fine species of *Epithemia*, resembling in form, but not in marking, *E. faba* (*E. zebra*); a fine *Navicula*, perhaps the same with *N. major* and *Fragilaria virescens*. In mud from one of the Momay springs there was *Epithemia Broomei*, *n. s.*, and two small *Naviculæ*; and in the spring two other species of *Epithemia*.

In the hot springs of Surajkund, and on their banks, at temperatures varying from 80° to 158°, at which point vegetation entirely ceases, a minute *Leptothrix* abounds everywhere, varying a little in the regularity of the threads in different specimens, but scarcely presenting two species. Between 84° and 112° there is an imperfect *Zygnema*, with very long articulations; and where the green scum passes into brown, there is sometimes an *Oscillatoria*, or a very minute stellate *Scytonema*, probably in an imperfect state. *Epithemia ocellata* also contributes often to produce the tint. An *Anabaina* occurs at a temperature of 125°, but the same species was found also in the stream from the springs, where the water had become cold, as was also the case with the *Zygnema*. Mr. Thomas Brightwell found in a portion of the same specimen, *Epithemia alpestris*. The *Diatomaceæ* consisted of—

Epithemia Broomei, *n. sp.* | *E. inaequalis*, *n. sp.*
E. thermalis, *n. sp.* | *Navicula Beharensis*, *n. sp.*

The vegetation in the three sets of springs was very different. As regards the *Confervæ*, taking the word in its older sense, the species in the three are quite different, and even in respect of genera there is little identity; but amongst the *Diatomaceæ* there is no striking difference, except in those of the Behar springs, where three out of the four did not occur elsewhere. In the Pugh and Momay springs, the species were either identical with, or nearly allied to, those found in neighbouring localities, where the water did not exceed the ordinary temperature.

In Ceylon, hot springs occur in two places in the Kandyan province, at Badulla, at Kitool near Bintenne, near Yaviutu in the Veddah country, and a fourth at Kannea, 7 miles beyond Trincomalee; and there are two in the province

of Uva, and one at Batticaloa. Their waters are considered efficacious in cutaneous ailments and rheumatism. A fifth is said to exist near the Patijal Aar, south of Batticaloa. The water in each is sufficiently pure to be used by the natives for domestic purposes.

In the hot springs of Kannea, the water flows at a temperature varying at different seasons from 85° to 115°. In the stream formed by these wells, M. Reynaud found and forwarded to Cuvier two fishes, which he took from the water at a time when his thermometer indicated a temperature of 37° Reaumur, equal to 115° of Fahrenheit. The one was an apogon, the other an ambassis; and to each, from the heat of its habitat, he assigned the specific name of *Thermalis*. Also a loche, *Cobitis thermalis*, and a carp, *Nuria thermicois*, were found in the hot springs of Kannea at a heat of 40° cent., 114° Fahr.; and a roach, *Leuciscus thermalis*, when the thermometer indicated 50° cent., 122° Fahr.

Fish have been taken from a hot spring at Puri when the thermometer stood at 112° Fahr., and as they belonged to a carnivorous genus, they must have found prey living in the same high temperature.

Fishes have been observed in a hot spring at Manilla, which raises the thermometer to 187°, and in another in Barbary, the usual temperature of which is 172°; and Humboldt and Bonpland, when travelling in South America, saw fishes thrown up alive from a volcano, in water that raised the temperature to 216°, being two degrees below the boiling point. The springs of Kannea are situated in low ground abounding in quartz, surrounded by low jungle, in an unhealthy country.

Of the two warm springs in the province of Ouva, one is at Badalla, in Upper Ouva, about 1861 feet above the level of the sea, where the mean annual heat is about 69°; the other is about a mile and a half from Aliputa, in Lower Ouva, near the path on the way to Kotahowa, about 1061 feet above the level of the sea, where the mean annual temperature is probably about 76°.

Hot springs also occur as under:—

On Ranjit river.—*Darjeeling Guide*.
 Between Meaday and the Arakan Hills.—*Phayre*.
 Sitacund, near Chittagong.
 Springs at Numyan, near Prome.
 Hot-water fountain at Tavoy; at Lunkyen, in Tavoy;
 and at Sienli in Martaban.—*Prinsep*.
 Near Kaline Aurig, Martaban.—*Low*.
 Hot spring on Attaran river, Tenasserim.—*Piddington*.
 Hot springs on the Palouk river and at Pee, between
 Mergui and Tavoy, some sulphuretted.—*Major W. M'Leod*.

There is a hot spring near Chirana Puteh, and another at Salanama in Rambu. Tin has been procured near Taba, and also near Chirana Puteh. Ayarpanas (hot water) spring near Malacca; its water, 115°, is said to be useful in rheumatism.

Hot springs, some of interest, exist at Yom-mack, in lat. 22° 24' N., long. 113° 28' E., about 15 miles N.W. of Macao, with a temperature from 132° to 190° Fahr. The springs are three in number, and are near a rivulet, 100 yards from the river.

Hot springs occur in the Shan-tung province of China at Ai-shan, about 12 miles from Ohefoo; also at Loong-chwen, 60 li E. of Ning-hai; at Wun-shih-ting, 70 li S. of Tung-chow; near Yichow-foo, and at Chau-yuen, 60 li W. of Whang-

hien. The water is sulphurous, and baths have been established there.—*Forbes, Ceylon*, ii. p. 49; *Bengal As. Soc. Journal*, 1848; *Mrs. Hervey's Tartary*, i. p. 94; *Patterson's Zoology*, part ii. p. 211; *Yarrell's British Fishes*, i. part xvi.; *Tennant's Ceylon*, p. 69; *Davy's Ceylon*, pp. 42-46; *Cartier's Western India*, p. 21; *Pottinger's Beluchistan*, p. 179; *Hooker, Him. Jour.*; *Tr. of Hind.*; *Dr. W. Hibtbert, in Jam. Ed. Journ.* xxiv., 1837; *Dr. R. Kirk, in Jo. B. Med. Soc. No. vi.*; *Fleming*; *Dr. A. Duncan, Bo. Medl. Pro.*, 1836; *Briggs*; *Dr. Macpherson, in Indian Annals of Med. Sci.*, 1854; *Mr. Livingstone, in Jam. Ed. Jour.*

HOTTENTOT, a race occupying a part of the extreme south of Africa, near the Cape of Good Hope.

HOUGH, MAJOR W., author of *A Narrative of the March and Operations of the Army of the Indus in the Expedition to Afghanistan in 1838-39*, and *History of the Doornance Empire to the Present Time*, London 1841.

HOURL. In Mahomedan belief, a woman in paradise. It is translated in Sale's Koran, chap. lv., 'beauteous damisels, having fine black eyes.'

HOUSE.

Bait,	ARAB.	Casa,	IT., SI.
Maison,	FR.	Oor,	TAM.
Haus,	GER.	Hlu,	TEL.
Khapa,	HIND., PERS.	Ev, Konak,	TURK.

In the granitic country of Telingana, the houses are usually built of adhesive earth or clay, of a square or rectangular form, smeared often with red earth, and picked out with perpendicular bands of slaked lime, with a pyramidal roof of palmyra leaves or grass. Houses in the Karnatic are of mud walls, with roofs thatched with grass or palm leaves. Houses on the banks of the Kistna, near its debouchure, have circular walls of adhesive earth.

In the Tamil and Telugu country, the walls are usually of mud, with thatch or tiles for the roof. The humbler races have circular houses; their houses in Telingana are detached from each other, outside the gharri or fort. In the Canarese tract about Hurrayhur, the back of the house is formed by raising a very high wall, on which a long sloping roof rests.

In Arabia and Mahomedan countries of Persia and India, houses have a common courtyard, with numerous rooms leading from it.

The circular form of hut is the only styie of architecture adopted among all the tribes of Central Africa, and also among the Arabs of Upper Egypt; and although these differ more or less in the form of the roof, no tribe has ever yet sufficiently advanced to construct a window. Their houses are circular and conical, with only one opening for a doorway.

The Yezdy, a Kurd race settled near Aleppo, build a stone wall, and erect over it a goat-hair roof.

In Persia, the cottages of the villagers and peasantry are of mud, or rough stones cemented with mud, and mostly consist of two rooms. The walls, which are usually about seven feet high, are very thick, and full of niches and recesses, which serve as cupboards for depositing all manner of miscellaneous articles. The roofs of the larger Persian houses are flat, and many have tall bad-gir or wind towers rising high above. The bad-gir is a large square tower, covered on the top, but opening below into the apartment

above which it is erected. The four sides are laid open in long perpendicular apertures like narrow windows, and within these are partitions or walls intersecting each other, so as to form four channels in the tower. By this contrivance, from whatever quarter the wind blows, it is caught in the tower and conveyed into the room below, so that a constant current of air is kept up, except when it happens to be a dead calm.

The cottage of Bengal, with its trim, curved, thatched roof, and cane or bamboo walls, is the best looking in India.

The houses of Hindustan are built of clay or unburnt bricks, and tiled.

In the greenstone tract of the Dekhan, Berar, and the Mahratta country, where wood is scarce and of high price, the walls are mostly of mud, with flat roofs. The houses are huddled close together, surrounded by a wall, often with a central gharri or fort.

Houses with a flat roof have a parapet (Deuteronomy xxii. 8) to prevent any one falling into the street.

Acts x. 9 tells us that 'Peter went upon the housetop to pray.' All the flat-roofed houses of India would admit of this; but some of the rich Hindus have a room on the top of the house, in which they perform worship daily.

2 Samuel xi. 2 says, 'And it came to pass in an evening-tide, that David arose from off his bed, and walked upon the roof of the king's house.' It is common in India with Mahomedans and Hindus to sleep in the afternoon. The roofs of houses are flat, and it is a pleasing recreation in an evening to walk on the flat roofs.

In Tibet, the peasant's house much resembles a brick kiln in shape and size. It is built of rough stones, without cement, and has two or three small apertures for ventilation. The roof is flat.

Houses in Burma, Arakan, the Straits Settlements, and all through the Archipelago, are raised on piles; some on the river side are built over the river on piles several feet high, with wooden or bamboo matting walls. The whole frontage on the left bank of the Moulmein river is built over, as also in Mergui. Some of the tribes of Further India live in great houses, communicating in their entire length. This is for defence.

Houses in many eastern countries are built as a quadrangle, the four outer walls being dead, or pierced with loopholes; in one of the halls is the entrance to an open unroofed courtyard, surrounded by chambers or open verandahs. This arrangement explains the circumstances of the letting down of the paralytic into the presence of our Lord, in order that he might heal him (Mark ii. 4, Luke v. 19). The paralytic was carried by some of his neighbours to the top of the house, either by forcing their way through the crowd by the gateway and passages up the stairs, or else by conveying him over some of the neighbouring terraces; and there, after they had drawn away the awning, 'they let him down along the side of the roof, through the opening or impluvium, into the midst of the court before Jesus.'

Matthew x. 12-14 says, 'And when ye come into an house, salute it. And whosoever shall not receive you,' etc. It is the custom amongst Hindus of a stranger to go to a house, and as he enters it to say, 'Sir, I am a guest with you to-night.' If the person cannot receive him, he

apologizes to the stranger.—*Horn's Critical Study of the Scriptures*, i. p. 385; *Shaw's Travels*, i. pp. 374-376; *Hartley's Researches in Greece*, ii. p. 240; *Robinson's Tr.* ii. p. 351; *Ward's Hindoos*.

HOUSE-LEEKS, King-t'ien, CHIN. The plants Umbilicus malacophyllus, Sedum acre, and Sempervivum tectorum, are grown on Chinese housetops, with the idea that they ward off fires.—*Smith, M. M. C.*

HOUSHA, in Bengal, a village authority.

HOUTMAN, CORNELIS, in A.D. 1595, as supercargo, was entrusted with the cargo of four ships to sail by the Cape of Good Hope to the East Indies, a company having been formed, entitled 'Het Maatschappij van verre Landen,' to carry out the Dutch enterprises in the east. He left the Texel 2d February 1595, crossed the line 14th June, doubled the Cape 2d August, landed at Sumatra 11th July 1596, and entered the harbour of Bantam 22d July. He purchased pepper and spices in the Sunda Islands and Java, and returned to the Texel in 1597.

A second expedition, in which he was slain, went out in 1598, and returned in 1600-1601. This seems to have been commanded by Admiral Vanneck, who formed an establishment at Java and in the Molucca Islands; and he was followed by Admiral Warwyk, who fortified the factory at Java, and formed alliances in Bengal. In 1621 the Dutch settled on Formosa, which soon attained a high degree of prosperity, but was ultimately wrested from them by a Chinese patriot. They have had a factory in Japan since 1640, where they submitted to very degrading treatment. The Dutch subsequently expelled the Portuguese and Spaniards from Malacca and from the Moluccas, and afterwards formed settlements at Timur, Celebes, Macassar, and Sumatra.

Spielbergen was the first Dutch navigator who touched at Batticaloa in Ceylon, in March 1602. He went to Kandy, where he was well received, entered into alliances with the king of Kandy in the year 1638, and for the next twenty years their wars with the Portuguese were incessant. The Portuguese finally departed on the 24th June 1658.

HOVA. The tombs of the Hova race of Madagascar consist of stone vaults, made of immense slabs of stones, flat inside, forming a subterranean grotto. They also erect stone pillars similar to menhir. The supposed aborigines of Madagascar were the Vasimba, whose tombs are small tumuli or cairns, surmounted by an upright stone pillar.

HOVENIA DULCIS. *Thunb.*

Chih-ku, Ki-ku-tsze, CHIN. Sicka, HIND.
Coral, Honey, and Kempokonnas, JAPAN.
White stone tree, Eng. Ken, Kimponass,

This tree grows in India, Nepal, China, and Japan. Its fruit are small, dry, and pea-like, pendent upon the fleshy peduncles, like the cashew nut. They greatly increase in size at the time of their maturation. The fruit-like thickened branches are of a russet colour, and filled with a pleasant, yellowish, pear-like pulp. The fleshy peduncles are said to counteract the immediate and after effects of wine.—*Smith, M. M. C.*; *Rorb.* i. p. 630; *Von Mueller*.

HOWA. ARAB. Eve, the mother of the human race.

HOWDAH, a seat, pad, or open litter fixed on the back of an elephant.

HOWLER, a name given to the Gulshaniyeh darvesh. See Darvesh.

HOWRAH or Haura, sub-district of Hoogly district, Bengal, with independent magisterial jurisdiction, lying between lat. 22° 13' 15" and 22° 47' N., and between long. 87° 47' and 88° 21' 15" E.—*Imp. Gaz.*

HOW-TSAO. CHIN. A bezoar stone, used in China for the treatment of Cynanche tonsillaris.

HOYA, a genus of plants of the natural order Asclepiaceæ. The species in Southern Asia are, —*H. carnosa*, fuscæ, lanceolata, linearis, ovalifolia, pallida, parasitica, Pottsi, pauciflora, pendula, and viridiflora. Several of the species, under the name of wax plants, are cultivated on account of their elegant flowers. *H. imperialis*, Lindl., of Borneo, is highly beautiful, its large and rich purple flowers being relieved by the white, ivory-like centre; it is epiphytal. *H. carnosa*, *R. Br.*, the flesh-coloured wax plant, is a native of China.—*Voigt*; *Wight*; *Eng. Cyc.*; *Low's Sarawak*, p. 67.

HOYA PENDULA. *Wight and Arnott.*

Asclepias pendula, Roxb. | *Hoya revoluta*, Wight.
A. Rheedii, W. and A. | *Nasjera patsja*, MALEAL.

This plant grows in the Circar mountains, Malabar, and Neilgherry Hills, and is used in medicine. Its flowers are middle sized, white, and fragrant.—*Voigt*.

HOYA VIRIDIFLORA. *R. Br.* *Asclepias viridiflora* of Roxburgh. A native of Coromandel, Sylhet, and the Neilgherry Hills. The root and tender stalks produce nausea, and promote expectoration. The leaves, peeled and dipped in oil, are used by the natives of India as a discutient in the early stages of boils, and in the more advanced stages to promote suppuration.

HSU SIEN, author of the Shuo Wen, a Chinese dictionary. It consisted of 10,000 separate characters, in the tablet and stylus form. Commonly called the 'Lesser Seal.' He lived in the time of the Han dynasty.

H'TEE, BURM., is the umbrella or canopy of gilt iron filigree which crowns every pagoda in Burma. Now-a-days, generally, a bottle is put on the H'tee, and a similar practice is said to be pursued in Ceylon, originating, as it is surmised, from the knowledge that glass is a non-conductor. The H'tee of the Shooay Dagon pagoda at Rangoon was renewed by the king of Burma in 1871 at a cost of £62,000, and about 50,000 people assembled to assist in putting it up. It was 47 feet high and 13 in diameter. Kings of Burma in 1755, and again in 1774, had asserted their sovereignty over Rangoon by thus crowning the great pagoda.—*Yule's Embassy*.

HUAKI. MAORI. A fabric of New Zealand used in clothing.

HUC and **GABET**, two French missionaries, who, by a route till then quite unexplored by any European, passed among the mountains north of Bhutan and Ava, and so made their way due east to the plains of China (Central Flowery Land). M. Huc wrote an account of his travels.

HUD. At Hasek is the tomb of the prophet Hud, the fourth in descent from Shem.

HUDDART. Captain Joseph Huddart, F.R.S., author of the Oriental Navigator, which first appeared in 1785, with an atlas of 108 charts. A second edition of it appeared in 1797, a third in 1801, and a fourth in 1808, of 755 pages. Its plan was adhered to by Captain James Horsburgh

(obit May 1836), under the title of India Directory, the first part of which appeared in 1809, the second part in 1811, and it has since gone through several editions. Its place has now been largely taken by two similar works, one under the editorship of Mr. Findlay, and another by Captain Taylor of the Indian navy.

HUDDEAROO. HIND. A kind of ring used at Mahomedan marriages.

HUDIGAR. KARN. A low caste in Mysore.

HUE or **Fue.** CHIN. A secret society.

HUGEL. Baron Charles F. von Hugel, author of *Kaschmir und das Reich der Siek*, Stuttgart 1840, describing his visit to the Himalaya mountains and the valley of Kashmir. The *Fische aus Caschemir* were described by MM. von Hugel and von Heckel. Baron Hugel met other two travellers in Kashmir, and they agreed to carve the following inscription on a black marble tablet, and set it up in the little building on the Char Chunar island:—'Three travellers in Kashmir on the 18th November 1835, the Baron Ch. Hugel from Jamu, Th. G. Vigne from Iskardu, and Dr. John Henderson from Ladakh, have caused the names of all the travellers who have preceded them in Kashmir to be engraven on this stone. Bernier 1663; Forster, 1786; Moorcroft, Guthrie, and Trebeck, 1823; Victor Jacquemont, 1831; Joseph Wolff, 1832.' Two only of these, the first and the last, ever returned to their native country. In the list they did not include Catholic missionaries. Forster did, strictly speaking, return home, but he came out again and died at Madras. When Char Chunar island was visited by Dr. Adams in 1854, the tablet had been removed.—*Hugel's Tr.* p. 144; *Buist's Cat.*; *Adams' Naturalist in India.*

HUGH LINDSAY was the name of the first steamer that conveyed an overland mail from Bombay to Suez. She was the first steamer that entered the Persian Gulf. She was lost coming out of the roads of Bassidore, a port on the island of Kishm, in the Persian Gulf.

HUGLI or Hoogly, a town in Bengal, in lat. 22° 54' 44" N., long. 88° 26' 28" E. It has the town of Chinsurah adjoining it on its south, and their joint population in 1872 was 34,761. A fort is said to have been built here by the Portuguese in 1537, and a population gathered around it. About the year 1629 it was taken by storm, under the order of the emperor Shah Jahan; but in 1640 the English East India Company, under a firman granted to Dr. Boughton, opened a factory here, and two years afterwards another at Balasor. Between 1685 and 1688, disputes arose between the Nawab of Bengal and the Company's servants; but peace was restored, and in the treaty permission was given to build a factory at Sutanati, the present site of Calcutta. Hoogly is the head station of a British revenue district, with an area of 1467 square miles, and a population in 1872 of 1,488,556 souls, the most numerous Hindu castes being the Bagdi, Kaibarta, Brahmins, Rajputs; and Mahomedans, 299,025. When Hoogly fort was taken by the troops of Shah Jahan by assault, after a siege of 3½ months, more than 1000 Portuguese were slaughtered, and 4400 men, women, and children were made prisoners of war. The best-looking young persons were sent to Agra, and circumcised and made Mahomedans. The girls were distributed among the harems of the emperor and his nobility. In Hoogly the first

press was set up in India in 1778, by Messrs. Halhed and Wilkins, on the occasion of the publication of a Bengali grammar by Halhed. The Bandel church is the oldest Christian church in Bengal, built, according to the inscribed date, in 1599. Prior to Hoogly, the royal port of Bengal was Satgaon. The Ganges formerly flowed by this place, and came out near Andool, and the remains of wrecked vessels have been turned out beneath the earth, which has overlaid the bed of the deserted channel. Satgaon is of great antiquity, having been known to the Romans under the name of Ganges Regia.

The Hoogly river is formed by the junction of the Bhagirathi and Jellinghi, two branches of the Ganges. It runs into the sea at Saugor roadstead, by an estuary 15 miles wide. Its length is 160 miles by winding of stream. It receives the Damodah, 350 miles; Dalkissore, 170 miles; Cossy, 240 miles; Mor, 130 miles; and about 49,000 square miles are drained. The river has on its banks Calcutta, Serampur, Chandernagpur, Hoogly, and Murshidabad. The rivers forming it are offsets from the western branch of the Ganges delta. The eastern or Saugor channel is the principal entrance. From Middleton Point light to Fort William at Calcutta is 83½ miles in length, following the windings of the river. It is the most westerly, and, for commercial purposes, the most important channel by which the Ganges enters the Bay of Bengal. Proceeding south and a little east from Santipur, the Hoogly river divides Murshidabad from Hoogly district, until it touches the district of the Twenty-four Parganas in lat. 22° 57' 30" N., and long. 88° 27' 15" E., close to the village of Bagherkhal. It then proceeds almost due south to Calcutta, next inclines to the south-west, and finally turns south, entering the Bay of Bengal in lat. 21° 41' N., and long. 88° E.

The Saraswati, now a muddy channel, enters the Hoogly at Satgaon, about 30 miles above Calcutta, and the Adi Ganga, now little more than a series of pools, which diverges south-east from it just below Calcutta, are both rivers of great sanctity. They are supposed to represent the original Ganges, Holy Mother Ganga, who takes her divine source in the Himalayas, and pours her waters into the Bay of Bengal at Sagor (Saugor) island. In August 1856, neap tide rose 15½ feet above the datum sill of the Kidderpore dock; and upon the 18th August 1856, spring tide rose to 22½ feet above the same datum, the greatest rise of the salt lakes being 12 feet. This is on the western side of the delta. On the eastern side the tides rise from 40 to 80 feet. The silt held in solution, earthy matter, carbonate of lime, magnesia, sulphates of lime and iron, at 3 feet of depth, varies at Calcutta and in the Gaspar Channel from 7.34 to 18.92.

The Hoogly is difficult to navigate. The tides run rapidly. The James and Mary Sands, 30 miles below Calcutta, used to be reckoned so perilous, that until well into the nineteenth century East Indianmen lay at Diamond harbour, just below their dangerous currents. A minute supervision of the channels, with steady dredging and a constant readjustment of the buoys, now renders the Hoogly a safe waterway to Calcutta for ships of the largest modern tonnage, drawing up to 26 feet. These sands are shallows formed

at the entrance into the Hoogly, from its western bank, of the Damodar and Rupnarayan rivers, which bring down the drainage of South-Western Bengal. These rivers discharge at sharp angles into the Hoogly, at a distance of only a few miles apart, nearly opposite Falta, which lies 27 miles by water from Calcutta. Their waters check the flow of the Hoogly, and lead to the deposit of vast quantities of the silt with which the Hoogly, Damodar, and Rupnarayan are loaded. If a ship touch the bottom of the sands, she is immediately pushed over by the current; and cases are known in which only the yards of a great three-masted ship have remained above water within half-an-hour after the accident; vessels become covered over with the sand if not promptly blown up. The sands extend upwards from Hoogly Point, 33½ miles from Calcutta, opposite the mouth of the Rupnarayan, to about Falta, 27 miles from Calcutta, opposite the mouth of the Damodar.

Fishermen, who have sea-going boats, inhabit villages near the entrance of the Hoogly.

A bore is caused by the head-wave of the advancing tide becoming hemmed in where the estuary narrows suddenly into the river, and often exceeds 7 feet in height. It is felt as high up as Calcutta, and frequently sinks small boats or dashes them to pieces on the bank. The tide itself runs as high up as Hoogly town.—*Tr. of Hind. i.* pp. 13, 15.

HUGONIA MYSTAX. *Linn.* *Modera kanni*, *MALEAL*; *Agur*, *TAM*. A shrub growing in Malabar, the Coromandel coast, and Ceylon, with large blossoms of golden-yellow colour. It is employed in native medicine.—*W. III.*; *Voigt*.

HUJERI. *ARAB.* A term applied to one of the servile races of Arabia. *Qu. Khijra?*

HUJRA. *PERS.* A place of assembly, a chamber. In Afghanistan, a house set apart for the accommodation of travellers, and where, in the evenings, the old and the young assemble to converse and smoke the chillam.—*Masson's Journeys*, i. p. 119.

HUJRA, a small town of 3000 inhabitants in the Montgomery district of the Panjab; residence of a branch of the Bedi Sikhs, descendants of guru Baba Nanak. It was conquered by Bedi Sahib Singh during the reign of Ranjit Singh, and held by him in jaghir from the Maharaja. His descendants still hold extensive revenue grants in the neighbourhood, and exercise considerable local influence.—*Imp. Gaz.*

HUJULOHIA. *HIND.* An epithalamium.

HUKKA. *HIND.* A pipe used in India, in which smoke is made to pass through water. *Hukka* bardar, a pipe-bearer. *Hukko* charsee Pattani, used by Patans for smoking charras, resin of hemp, or *Cannabis sativa*.

HUKMCHIS. *HIND.* A dark-coloured gum obtained from the date palm.

HUKUM or *Hukung*, a valley in Assam, about 1000 feet above the level of the sea. It is surrounded on the north and east by mountains elevated 6000 and 6000 feet, and is traversed by numerous ranges of low hills.

HULAETA. *HIND.* In Hindustan, the first ploughing of the season, which is generally preceded by the taking of omens, and other superstitious ceremonies. The note of the koel bird, amongst other auguries, is considered very favourable, and its utterance is of such authority as to enable the cultivator to dispense with a formal application to a Brahman.—*Ell.* See *Hal*; *Har*.

HULARI, a mountainous district near Shiraz, with fine vineyards, from which the choicest Persian wine is prepared, both red and white. This wine has much body; it resembles the strong Cape wines, and is fit to be exported.

HULASWAR, a division of the Holeyar of the Canarese-speaking race.

HULDI or *Haldi.* *HIND.* Turmeric; *Curcuma longa*, *Roxb.* It takes an important place in many of the customs of the people of India. *Haldi mehndi* is a Mahomedan betrothal ceremonial, as also are *Haldi* or *Munja baithna*, *Haldi chor*, and *Haldi saoo*. The Hindu races use it largely for smearing their bodies, and to dye with it portions of their new clothes to avert the evil eye.

HULKA-BUNDI or *Halka-bandi.* *HIND.* A system of schooling, embracing those of the circle of villages in which they were established.

HULL. *E. C. P.* Hull, author of *Coffee Planting* in Southern India and Ceylon, London 1877.

HULLAH or *Nimboli.* *HIND.* A neck ornament worn by Mahomedans.

HULLAR or *Hulla*, a district which forms the chief part of the southern shores of the Gulf of Cutch. The land near the sea is low, but all well watered. Nowanagar is the principal place of the district. The Roje temple is in lat. 22° 32' 50" N., and long. 70° 1' 30" E.

HULLE MUKKALU, a caste in Mysore who live by begging, and by fees from goldsmiths' shops, blacksmiths' shops, and at marriage ceremonies.

HULUGU, grandson of Cheugiz Khan, founded the Mongol dynasty of Persia. On the 22d of January 1258, he appeared with his army before Baghdad. On the first of February he took the city by storm, and put an end to the power of the khalifa. He had made the khalif Mostassim believe that he was willing to give his daughter in marriage to the khalif's son. But when the principal people were thus all got together, the Tartars set on them, and put them all to death. Baghdad, the city of science, learning, and pleasure, was given up to pillage and slaughter, and more than 800,000 persons were mercilessly destroyed. Sanut declares that Hulugu killed the khalif by pouring molten gold down his throat. Whilst the Mongol were covering Poland with blood and ruins, Hulugu, in the east, was completing the conquest of Syria. After the capture of Baghdad, he entered Mesopotamia, seized on Merdin and Harran, passed the Euphrates, and made himself master of Aleppo and Damascus. The Tartar general had sent orders to Nasir, the sultan of Aleppo, to submit at once, and come in person to meet him. Not being complied with, Hulugu laid siege to Aleppo. Twenty catapults played for five days against the town, and it was taken by assault on the 18th January 1260. An incredible amount of treasure was found in it, and the carnage was still more horrible than at Baghdad. The streets were choked up with corpses, and it is stated that 100,000 women and children were sold for slaves in Little Armenia or in the territories of Europeans. He was succeeded by his son Abaka, who married a daughter of Michael Palæologus, the Greek emperor. His brother Nicolas, who succeeded him, became a Mahomedan; but Arghun Khan, son of Nicolas, was hostile to the people of that creed. Arghun sent embassies, conducted by a Genoese named

Buscarelli, to the Pope, and to the kings of France and England, proposing an alliance against the Saracens and Turks; and in 1290 Edward I. of England sent Geoffrey de Langley on a return mission to him. Arghun having lost his favourite wife in 1286, sent Kublai Khan to select another for him, and the Polo relatives were commissioned by Kublai Khan to escort the new bride he had chosen for his nephew, to the Persian court. —*Huc's Christianity*, i. p. 268.

HUMA, a fabulous bird, the phoenix of classical writers, also the hoopoe, *Upupa* epo.

HUMAYUN, emperor of India, twice reigned in that country, viz. from the death of his father Baber, 26th December 1530, till he abdicated on the 9th July 1543, and again from re-accession, A.D. 1555, till his death. Humayun was the eldest of four sons of Baber. Of these, Kamran was governor of Kabul and Kandahar at the time of their father's death, but Hindal and Mirza Akbari were unemployed in India. Humayun on accession ceded the Panjab and the country on the Indus to Kamran, in addition to his former territories; gave the government of Sambal to Hindal, and that of Mewat to Mirza Askari. Humayun's first operations were against Bahadur Shah, king of Gujerat, and he was one of three hundred chosen men who, at night, in August 1535, scaled the almost perpendicular rock on which the hill fort of Champaner is built. Sher Shah's revolt, however, recalled him to Hindustan and the banks of the Ganges; but, after gaining temporary advantages, in a general action in April 1540, near Canouj, Humayun's forces were defeated and driven into the Ganges, Humayun himself escaping to the other side with great difficulty. He sought protection from Kamran at Lahore, then, failing in an invasion of Sind, he sought and found an asylum with Maldeo, raja of Marwar, but finding Maldeo likely to deliver him up to his enemies, he moved to Amerkot, a fort in the desert not far from the Indus. The journey through the desert was calamitous; many of his companions died miserably from thirst; Humayun, with only seven mounted attendants, entered Amerkot, and was received kindly by the chief, Rana Parshad. Here, on the 14th October 1542, was born his son Akbar. His fortunes still varied, and he sought protection with Shah Tahmasp, king of Persia. He sent his confidential officer, Bahram Khan, to meet the king, and followed afterwards on a visit, but found himself a prisoner, was compelled to accept the Shiah doctrines and forms, and promised to introduce it into India, to wear the Kazzil-bash cap, and to cede the kingdom of Kandahar. At length he was allowed to depart, and, arriving at Seistan, he found 14,000 horse awaiting his arrival, under the command of Morad Mirza, king Tahmasp's son.

He took Bast on the Helmand, besieged and took Kandahar, March 1545. Mirza Askari took Kabul, and recovered Akbar, but only again to sustain reverses in Balkh, during which he fled with only eleven attendants to Badakhshan. Recovering somewhat, he overthrew Kamran (1547), and all the brothers (1548) were reconciled, and took food together; only again for Humayun to meet with further reverses, for Humayun marched against the Khalil, but in a night attack he was defeated by these mountaineers, and his brother Hindal killed. Humayun

again took the field, defeated the Afghans, and compelled Kamran to fly to India, where he took refuge with Sultan Selim, and afterwards with the Sultan of the Ghakkars, who in September 1553 betrayed him to Humayun. He was blinded, and allowed to proceed to Mecca, where he soon after died. Humayun passed a year at Kabul and Kandahar; and on the death of Selim Shah he set out from Kabul with 15,000 horse in January 1555, to Lahore, overthrew Sikander Shah at Sirhind, and took possession of Dehli and Agra. In less than six months after his return to the capital, when descending the stairs from his library, hearing the muazzan's call to prayers, he repeated the creed, and sat down on the steps till the azan was finished. As he rose with the help of his staff, it slipped on the polished marble step, and he fell over the parapet, and was stunned. On the fourth day of the accident he expired, A.D. 1556, A.H. 963, in the 49th year of his age and 26th of his reign, including the 16 years of his banishment from his capital. He was succeeded by his son Akbar, then thirteen years and four months old; and in Akbar's reign India was formed into one empire. Humayun in all his military operations had shown no want of personal courage, but great deficiency in enterprise, and he had gone through his subsequent calamities with cheerfulness that approached to magnanimity. —*Elphinstone*, pp. 384-418.

HUMBOLDTIA UNIJUGA. *Bedd. Ic.* A handsome middling-sized tree, growing abundantly on the Travancore Ghats, in the dense forests a little below the Attraymally, 3000 to 4000 feet elevation; timber very hard and durable. Wight gives also *H. Brunonia*, *laurifolia*, and *Vahlia*. —*W. Ic.*; *Beddome, Fl. Syl.*

HUME, ALLEN OCTAVIUS, C.B., a civil servant of the Bengal Presidency, and author of *The Game Birds of India*. While magistrate of Etawa, by force of will and mild obstinacy of purpose, he overcame much resistance from the natives, and for years continued toiling at schools and Christianity, and all that elevates the human heart. He was an instance how much can be done in India by the influence of one man. It is in India where such influence attains its highest sway. A place more desert-looking and hopeless of growth for any European seed could hardly be selected; yet this one pale Englishman, of slender frame and ascetic habits, developed upon that fiery soil a caste of natives unsurpassed in firm allegiance and educational distinction. —*T. J. Howell-Thurlow, The Company and the Crown*, p. 89.

HUMEA ELATA. *Roxb.* Masjot, BENG. A tree of Chittagong which attains a great size. *Humea elegans* is an ornamental plant of N. S. Wales, grows to the height of 5 or 6 feet; colour of the flower red, and well adapted for borders; it requires a good soil. —*Roxburgh*, ii. p. 640; *Riddell*.

HUMEANA. HIND. A waist-belt to carry money.

HUMPI, a ruined city in the Bellary district of the Madras Presidency, known formerly as Bijanagar, also written Vijayanagar and Vijianuggur, properly Vidianuggur, or the town of learning. There is a tradition that there was a town here about A.D. 1100, but it first acquired a name from being occupied or founded by two fugitives from Telingana, or, according to Prinsep,

in 1338 by Bilal Deo of Karnata, who resisted Muhammad Taghalaq, and founded Vijayanagar. In 1347, Krishna Rai ruled there; in 1425, Deva Rai; in 1478, Siva Rai. Vijayanagar sovereigns claimed to be of the Yadu race. Towards the 15th century, the city had become the capital of a great Hindu power, which ruled over the Hindu chiefs to the south of the territories of the Adal Shahi, Nizam Shahi, and Kutub Shahi, kings of the Dekhan. In the middle of the 16th century, these three Mahomedan kings, fearing the growing power of Ramaraja, the sovereign, made war against him. Rama was then in his 70th year. He met the confederates at Talicottah, on the 25th January 1565, with a great army of 70,000 horse, 90,000 foot, 2000 elephants, and 1000 pieces of cannon; but he was defeated with a loss of 100,000 men, and was taken prisoner. The authors Khafi Khan and Shahab-ud-Din state that the elephant on which he was mounted ran away with him into the confederates' camp. He was beheaded at Kala Chabutra, in the Raichore Doab, and his head remained for 200 years at Bijapur as a trophy. Vijayanagar sank into an insignificant place, and is now known as the ruins of Humpi. The raja's brother, however, took refuge in Peniconda, and subsequently at Chandragiri, whence the English merchants obtained the grant of the ground on which Madras was built, and engraved on a gold plate, which was lost in 1746, when Madras was captured by the French under Labourdonnais. The descendant of Ramaraja is the raja of Anagundi, whose title is Sri Mudrajadhi Raja, Raja Parameswara, Sri Virapratapa, Sri Vira Terunala, Sri Viravenkata Ramarawya, Dava Maharawya Sumstan Vedaya Nagarum.—*Wk. II. I. p. 459.*

HUMULUS LUPULUS. *Lin.* The hop plant; has been extensively distributed in the Himalayas. At 2500 feet, in the Dehra Doon, it grows well, and at an altitude of 6000 feet in the Government gardens, Mussoori, but in those regions the highest limit appears to be 4000 or 4500 feet. It has been successfully cultivated in Dehra Doon for many years, so far as mere growth is concerned; but heavy rain at the flowering period prevents the flower from reaching perfection as to quantity and quality of the powder on which its value depends, and the results have, on the whole, been unsatisfactory.—*Stewart, P. Pl. p. 217.* See Hops.

HUN. *HIND.* A gold coin of S. India, worth 31½ rupees, called pagoda by the British. It is about 50 grains weight.

HUN, a race who have secured for themselves a niche with the 36 races of India. D'Anville, quoting Csoma de Koros, informs us that the White Hun occupied the north of India; and it is on the eastern bank of the Chambal, at the ancient Barolli, that tradition assigns a residence to the Hun; and one of the celebrated temples at that place, called the Sengar Chaori, is the marriage hall of the Hun prince, who is also declared to have been possessed of a lordship on the opposite bank, occupying the site of the present town of Bhynaror. In the 12th century the Hun must have possessed consequence, to occupy the place they hold in the chronicle of the princes of Gujerat. The race is not extinct. One of the bards pointed out to Colonel Tod the residence of some in a village on the estuary of the Myhie, though degraded and mixed with other classes. There

are also two tribes in the Himalaya who have preserved this designation,—the one in Gnari Khorsum, who call themselves Hunia; the other being the Limbu in Nepal and Sikkim, a large division of whom are called Hung. Arrian, Strabo, and Ptolemy state that a race known as the White Hun were established in the Panjab and along the Indus about the beginning of the Christian era. They are mentioned in the Mahabharata and Markandeya Purana; Dr. Fergusson says (p. 39) the White Hun or Ephthalites are the Jat.

The Hun are known in Chinese history as Heung-noo, meaning boisterous slaves. The Hiatilla or White Hun issued from the plains near the north wall of China, made themselves masters of the country of Transoxiana and Khorasan, and anticipated the irruption of those Turkish tribes who afterwards expelled the Hiatilla from the lands that they had taken from the Sacæ or Scythians. There is every ground to conclude that it was an army of the Hiatilla that invaded Persia in the reign of Bahram-Gor, A.D. 420, and that it was to one of their kings that Firoz fled, A.D. 475.

The Hun who appeared in the west, dated their empire from one of the princes of the Hia (Hya) dynasty. Their country was of great extent, situated on the west of Shen-si, of which they possessed the western parts; and their posterity still inhabit a part of that territory, the present Ele or Ili. They were one of those extensive tribes which the ancients comprised under the name of Scythians.

It was from Ili valley and town in Central Asia that Lassen supposes the Szu Tartars were expelled by the Yue-tchi or White Huns, B.C. 150. The Szu Tartars he supposed to be the Sacæ, and the Yue-tchi to be the Tochari. After occupying Tchia or Sogdiana for a time, they are stated by the Chinese to have been driven thence by the Yenger some years afterwards, and to have established themselves in Kipen, in which name Lassen recognises the Kopen valley in the Kohistan. The great Kirghiz horde is adjacent to Ili and Tarbagatai. It is under the dominion of China, and exchanges large quantities of cattle on the frontier for silk goods.

HUNDE. *KARN.* A name of the Kuru-baru, Mysore shepherds.

HUNDES or Gnari Khorsum is a part of Chinese Tibet comprising the upper basin of the Suttlej and headwaters of the Kamali river. For the name, Professor Wilson gave Hun, snow, and Des, country; but Captain H. Strachey derives the name from the Sanskrit Hun, meaning the aborigines of the country north of the Himalaya, who are mentioned in the Mahabharata and the Markandeya Purana. This latter explanation commended itself to the Hungarian scholar, Csoma de Koros, who thought that he might find in these parts the origin of his own people. Mr. Ryall's derivation is from a Sanskrit word meaning gold, Hun-des being the gold country. The Hunia people of Hundes are chiefly nomades, owning large flocks of sheep, and herds of cattle and goats. They are a good-natured race; ugly, simple, and, like most dwellers in cold regions, extremely dirty. They practise polyandry, and in their customs are like the Bhot of Ladakh described by Cunningham. There are five principal passes leading into Hundes from British

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territory. The traffic is only open between the 15th of June and 15th October, and not even then without the express permission of the Chinese authorities at Lhasa, who carefully satisfy themselves that no epidemic prevails in the Ghats in British territory. The gold-fields of Hundes lie chiefly in the neighbourhood of Thok Jalang, 100 miles N.E. of Gartok. Washing operations are carried on under the supervision of a gold commissioner, who is called Sarpan, and takes a royalty of $\frac{1}{10}$ ths of an ounce yearly from each digger. At Gartok, fine gold-dust sells at Rs. 1½ in weight for Rs. 16. The greatest demand for gold is at Lhasa. In the early part of the 19th century, the gold-fields round Lake Manasarowar were worked rather extensively; but an epidemic breaking out amongst the miners, the authorities at Lhasa interposed, and the operations were stopped. The Hunia all drink tea, and travel great distances, living on it and sattu, the flour of a parched grain. The Hunia only grow small patches of uwa, a kind of barley, and obtain their other grains from the hill territories of British India. They keep three years' supply of grain in store, to obviate the stoppage of the roads. Their villages are mere tents.—*Tod's Rajasthan*; *Gutzlaff's Chinese History*; *Malcolm's Persia*; *Chatfield's Hindustan*; *Ritchie's British World*.

HUNDI, an Indian draft or bill of exchange, drawn by or upon a native banker or sirraf, commonly written shrof.—*Simmonds' Dict.*

HUNGARY, a kingdom of Europe, divided by the river Danube into Upper and Lower Hungary, and subdivided into 46 counties. The Hungarian, Lapponian, and Finnish dialects are now classed as members of the great Turanian or Tartar family of tongues, which is spoken by all the tribes from the Himalaya to Okotsk and to Lapland, and includes the Hungarian, Crimean, and Turkish tongues.

HUNG KIAO. CHIN. The Red Church, also known as Brug-pa, the designations of the Sakya priesthood of Tibet.

HUNGRUNG, a district adjoining Ladakh, belongs to the raja of Bhatun, its villages lying from 9500 to 12,000 feet above the sea.

HUNG SING-WONG, with the Chinese, the god of the Southern Ocean, and a state deity of China.

HUNSUR, a town in Mysore, on the right bank of the Lakshmantirtha, in lat. 12° 17' 40" N., long. 76° 19' 5" E.; population (1871), 4293. It has the breeding establishment of the Amrita mahal, a select breed of draught cattle, said to have been formed by Hyder Ali for military purposes, and still kept up by the British Government.

HUNTER, ALEXANDER, M.D., a medical officer of the Madras army, who about A.D. 1851 founded the first school of industrial arts seen in India, and, with much devotion and self-sacrifice, by the year 1871 he had taught one or other branch of art—drawing, pottery, etc.—to upwards of two thousand young men, all of whom had found ready employment. His success led to the formation of several other schools of art in other parts of India. He devoted much of his attention to the manufacture of fibres from the plants of the south of India, and to the discovery of minerals useful in the arts.

HUNTER, Dr. W. W., LL.D., C.I.E., a Bengal civil servant, author of *Rural Life in Bengal*.

HURDOUR.

Comparative Dictionary of the Non-Aryan Languages of India, London 1868. He was Statistical Officer to the Government of India, compiled in 18 volumes the Statistical Report of Bengal, and, after years of labour, issued the Imperial Gazetteer of India, in 9 volumes. The work is one of administration, and is the necessary complement of the transfer of India from the Company to the Crown. During the E. I. Company's rule it had several times been projected. Dr. Hunter in his preface names ten persons who were his assistants. He wrote also Orissa in 2 volumes, and also a life of Lord Mayo. His varied talents were utilized by being nominated a member of the Council of the Governor-General of India, and was employed in 1882 to ascertain the state of education amongst the people.

HUNTERIA CORYMBOSA. *Rorb.* A tree of Penang. This and *H. Zeylanica*, *Thw.* (*Maddeya*, SINGH., the *Cameraria Zeylanica* of Retz), are supposed by Colonel Beddome to be the same. The timber is very fine and close-grained, and very similar to boxwood; it answers well for engraving.—*Beddome, Fl. Sylv. part xxiii. p. 265.*

HUNTING LEOPARD, or Hunting Cheeta, *Felis jubata*. These animals live mostly in the plains, where they hunt deer or antelope in parties of four or five together, in the same manner as the wolves do, secreting themselves in bushes at different points, while one of their number chases the buck. On its passing the ambuscade, they pounce out on the little gazelle, or take up the running in turns as it races past them.

HUNZA-NAGER are two adjoining towns, and include a small tract of country on the upper course of a large feeder of the Gilgit river, having an area of 1672 square miles.

HU-PEH is the northern division of the ancient province of Hu-kwang, and is bounded on the N.W. by Shen-si, on the S.E. by Ho-nan, on the E. by Ngan-hoei, and the W. by Sze-chuen. Its population is about 27 millions. Hu-nan is the southern division of Hu-kwang, and is larger than the northern portion just described, but it is not so thickly populated.

HURA CREPITANS. *Linn.* The sand box-tree, a middle-sized tree of rapid growth, native of tropical America. The trunk is strongly armed, the wood light and useless. The sap of the leaves and trunk is so very poisonous, as to produce blindness in a few days after touching the eye. Seeds a violent, drastic, dangerous purgative.—*M. E. J. R.; Voigt.*

HURALA. CAN. Four sorts of Hurala, lamp-oil seed, are grown in Mysore.—*M. E. of 1857.*

HURDAH. HIND. A parasitic fungus in the form of an orange-coloured rust. It is of the genus *Trichobasias*; it attacks growing wheat and barley.

HURDI-MURDI, in Persia, is a term employed to designate all the trifling but necessary articles which travellers fling in small bags, and carry across the saddle on a journey, in order to have them at hand.

HURDOUR or Harlaur is the name given in Hindustan to the oblong mounds raised in villages, and studded with flags, for the purpose of averting epidemic diseases, and especially the cholera morbus. It is called after Hurdoul Lala, the son of Bursing Deo, from whom are descended the rajas of Dutta. The natives have a firm persua-

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sion that the cholera broke out in Lord Hastings' camp, in consequence of beef having been killed for the European soldiers within the grove where repose the ashes of this Bundelkhand chief. His worship prevails throughout the Upper and Central Doab, a great part of Rohilkhand, and to the banks of the Sutlej. To the eastward the worship of Hoolka Devi (the goddess of vomiting) has been prevalent since the same period.—*Elliot*.

HUREE-HARA. SANSK. Both words are derived from Rhree, to take away, possibly the source of the English word to harry.

HURINGATTAH, an entrance to the Ganges, on the west of Rabnabad Island.

HUR KI PAIRI, sacred steps leading down to the Ganges.

HURMUL SEED, Lahuri hurmul, HIND. The *Harmala* semina are seeds of *Peganum harmala*, grey, small, pyramidal, and triangular, and used as rue.—*O'Sh.*

HUR-PUJA or Har-puja, amongst the agricultural races of India, the worship of the plough. This takes place on the day which closes the season of ploughing and sowing. It generally occurs in the month of Kartik, but in some places is held both after the kharif and rabi sowing, i.e. in the months of Sawun and Kartik. The plough is washed and decorated with garlands, and to use it or lend it after this day is deemed unlucky. The practice reminds of the Fool-plough in England, a ceremony observed on the Monday after Twelfth Day, which is therefore called Plough-Monday, on which occasion a plough adorned with ribbons is carried about, and the peasants meet together to feast themselves, as well as wish themselves a plentiful harvest from the great corn sown (as they call wheat and rye), as well as to wish a God-speed to the plough, as soon as they begin to break the ground to sow barley and other corn.—*Br. Ap. ii. No. 92, Elliot's Sup. Gloss.*

HURRICANES.

Tufan, . . . ARAB., HIND.	Tund-howa, . . . HIND.
Mou being, . . . BURM.	Gird-bad, . . . PERS.
Typhoon, Tyfoon, . . . ENG.	Huracan, . . . SP.
Orkun, . . . GERM.	Kyar, . . . TURK.

Hurricanes have been investigated by Colonel Capper, Quartermaster-General of the Madras army, Mr. W. C. Redfield of New York, Dr. Thom of the British army, Colonel Reid, Mr. G. T. Taylor of Madras Observatory, and Captain Piddington of Calcutta. A hurricane means a turning storm of wind blowing with great violence, and shifting more or less suddenly, so as to blow half or entirely round the compass in a few hours. The present state of our knowledge seems to show that, for the West Indies, the Bay of Bengal, and the China Sea, the wind in a hurricane has two motions, the one a turning or veering round upon a centre, and the other a straight or curved motion forward, so that it is both turning round and rolling forward at the same time. It appears also that, when it occurs on the north side of the equator, it turns from the east, or the right hand, by the north towards the west, or contrary to the hands of a watch; and in the southern hemisphere, that its motion is the contrary way, or with the hands of a watch. Piddington's first memoir, with the charts and diagrams, showed that this rule held good for the storm of June 1839 off the Sandheads, and that the wind was really blowing in great circles in a direction as described,

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i.e. against that of the hands of a watch. He assumed, then, that the hurricanes in the Bay of Biscay always follow this law.

The tyfoons and storms of the China Sea and eastern coast of Asia appear to be similar in character to the hurricane of the West Indies and the storms of the United States coast, when prevailing in the same latitudes. A tyfoon which occurred in the China Sea in 1831, affords probable grounds for connecting the hurricane at Manilla, October 23-24, with that of October 31 at Balasor, on the shores of the Bay of Bengal.

Of 61 hurricanes that occurred north of the equator, from 1830 to 1854, their numbers were—in the month of October, 12; May and November, 9; September, 8; April, August, and December, each 5; July, 4; June, 2; and March, 1. In the Bay of Bengal the hurricanes usually occur at the changes of the monsoons, in April and May, and in October, November, and December.

The S.W. monsoon prevails north of the equator, and when it prevails, the S.E. trade-wind acquires additional strength from the demand made upon it to supply the S.W. monsoon, these two winds being apparently one system under the influence of the earth's rotation and the high temperature which prevails in the northern hemisphere.

Gales and hurricanes occur in the Indian Ocean south of the equator. Trade-wind gales occur at all seasons, but chiefly in June, July, and August. In these the wind veers but little. In the extra-tropical gales, between lat. 30° and 45° S., the wind veers much, and in the tropical hurricanes the winds veer and shift.

South of the equator, hurricanes occur in November and May, and travel to the W.S.W., and afterwards, but not always, to the S. and S.E., the wind invariably moving round a central space (which is usually characterized by a calm) from left to right, or with the hands of a watch; while the storm, which has a diameter of 1 to 1500 miles, moves onwards at the rate of 1 to 20 miles, but more frequently 4 to 7 miles an hour, for a period varying from a few hours to ten days, attended with torrents of rain, and its northern half often with lightning. Dr. Thom showed that south of the equator these rotatory storms are always generated between the N.W. monsoon and S.E. trade-wind. They occur only during the S.W. monsoon months, and their rise and progress are intimately connected with the S.E. trade-wind and N.W. monsoon, two opposing winds. With ships, the safest course is to lie to and watch the barometer and wind, till the bearing of the centre be known with some certainty.

Of those who have resided at Mauritius, who have earnestly studied and discussed the laws which govern these storms, may be mentioned Dr. Thom, Lieutenant Fryers, Royal Engineers, Mr. Sedgewick, who published a little work, which he called *The True Principle*, and Mr. Bosquett, of the Observatory at Mauritius, who translated into French Piddington's *Hornbook*, with annotations of his own, and who claimed to be able, by careful and constant meteorological observations, to foretell the occurrence of hurricanes in the Indian Ocean, and to describe the course they will take. The chart in Piddington's *Hornbook* shows that these cyclones never extend to the northward of 10° or 12° south latitude in the meridian of Mauritius. Therefore vessels leaving the island in the

hurricane season for any part of India, should steer to the northward, passing well to the westward of the Cargades, a most dangerous group, thus keeping a clear sea open to the westward, that there may be nothing in the way should it be desirable to run to the northward and westward, which would be the true course to take in case of encountering the south-western or north-western quadrants of a cyclone (of which in the hurricane season a vessel from Mauritius is in danger), and this course she should keep until she is sufficiently far north to be beyond its influence.

Of the more remarkable occurrences, that at the mouth of the Ganges, on the 7th October 1737, was attended by a violent earthquake, and extended 60 miles up the river; 20,000 craft of all descriptions were destroyed,—amongst them, 8 English ships and all their crews,—and 300,000 souls are said to have perished in Lower Bengal, or in the bay. The river rose 40 feet above its usual level. An English church and steeple sank into the earth the next morning.

On 4th October 1739, a cyclone occurred at Gauges mouth, in which 30,000 lives were lost.

Madras has been subjected to severe hurricanes, generally in the early part of May or the end of October. They seem to travel up from the E.S.E., and progress rapidly in a W.N.W. direction till they touch the land, and then they assume a westerly or sometimes W.S.W. course. Their centres generally come right on to the port of Madras. A hurricane has seldom been known to extend south of Porto Novo, 120 miles from Madras (out at sea they are met with as far south as Ceylon), or north of Nellore, 100 miles from Madras. Their diameters are about 150 miles, and they revolve in a direction contrary to the hands of a watch. When the hurricane's centre comes right on to Madras, and there takes a west course, the wind is first at N., increasing in violence for a few hours, and then a lull or perfect calm for half an hour or so, when the hurricane recommences furiously from the exactly opposite quarter, south. This is in accordance with the theory of cyclones. Usually the gale commences about N.N.W., showing that the vortex of the cyclone bears about E.N.E. Vessels, therefore, warned by the barometer, the hollow breaking surf, the threatening sky, and the signals of the master attendant, should at once put to sea (having previously close-reefed and sent down top-hamper). The course to steer, and fortunately it is one which the wind assists, is S.S.E. to S.E. In a few hours the vessel will probably have the wind moderate at west, and may—in fact it has been done—sail round the cyclone, the wind veering to south and then to east. Vessels at first steering east to get away from the land have run right into the vortex of the hurricane. The only danger in a southerly course is from the storm-wave setting the ship on shore. If the lead give notice of this, the ship must be hauled up more to the eastward.

If the gale commence N.N.W. at Madras, and end at S.E., as has often happened, it shows that the centre has taken a W.S.W. course, and passed a little to the south of the town; but if it end at S.W., it shows that the centre has taken a W.N.W. course, and the vortex passed to the north of Madras.

In the earliest notices that we have of hurri-

canes on the Madras coast,—at least of those of which we have any record,—was that of the 3d October 1746, twenty-three days after the surrender of Madras to M. de la Bourdonnais. On the 2d of October the weather was remarkably mild during the whole of the day, but about midnight a most furious tempest arose, which continued with great violence till noon of the following day. When it began there were six large French ships in the Madras roads, and some smaller ones. The *Duc d'Orleans*, *Phoenix*, and *Lys* put to sea and foundered, and in them upwards of twelve hundred men were lost. The *Mermaid* and *Advice*, prizes, shared the same fate. The *Achille* (the flag-ship of M. de la Bourdonnais) and two other vessels of war were dismasted; and they had shipped so much water that the people on board expected them to go down every minute, notwithstanding they had thrown overboard the lower tier of guns. Of twenty other vessels belonging to different nations in the Madras roads when the storm began, not one escaped, being either wrecked or lost at sea. The ships which were at anchor in the road of Pondicherry felt nothing of this hurricane.

Another hurricane occurred off Cuddalore on the 13th April 1749. (It is rare to meet with hurricanes before May.) The English army were then on their march to Tanjore, to set Sahoji on the musnud and depose Pretaub Singh. Admiral Boscawen had agreed to send some ships to escort the troops, cannon, and stores to the place at which they designed to disembark them, which was at Devicottah, south of the Colerun river. A dreadful hurricane at N.N.W. came on on the night of the 12th of April, and continued all the next day. Its greatest violence was between eight at night of the 13th, and at two the next morning, shifting round from the northward to the east, till it came to the south, where it ended. In this storm H.M. ship the *Pembroke* (one of those appointed for the above service) was driven ashore and wrecked on the Colerun shoal, a little off Porto Novo. The captain, all the officers (except the captain of marines and purser, who were ashore on leave), and 330 men were drowned, only 12 men being saved. In the same storm the 74 gun ship *Namur* (Boscawen's flag-ship) foundered in shoal water, not far from Devicottah. The first, second, and fourth lieutenants, master, gunner, two lieutenants of marines, and 520 men were drowned; only two midshipmen and 24 men were saved. The admiral, captain, and some other officers were on shore. The *Lincoln* and *Winchelsea*, E.I.C. ships, were likewise wrecked off Fort St. David, but the crews were saved. Almost all the small vessels that were near Fort St. David were lost. H.M. ships *Tartar* and *Dent Castle*, together with the *Swallow* sloop, being at sea, and more to the southward, did not feel the tempest in that violent degree with which it raged near the coast, but they were all dismasted. The rest of the fleet were fortunately at Trincomalee. The English camp was at that time some miles from Porto Novo, and was so devastated that the army were obliged to march to Porto Novo for equipage.

Orme mentions a hurricane on the 31st October 1752, as the most violent that had been remembered on the coast.

The new year of 1761 was ushered in with a most violent hurricane at Pondicherry. At this

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time the British were laying siege to that town, and the fleet were in the roads intercepting all succour by sea. When the storm began, Admiral Stevens had with him eight sail of the line, two frigates, a fire-ship, and a ship with stores. From 8 P.M. of the 31st December, till 10 P.M., there was a constant succession of very heavy squalls. About 10 P.M., Admiral Stevens, in the *Norfolk* (having for his captain the gallant and unfortunate Kempenfelt), was forced to cut his cable, and made the signal for the squadron to do the same. But the noise and violence of the gale was such that no guns could be heard or signals observed. The other commanders accordingly obeyed previous orders, and continued at anchor, till at length their vessels parted, and then with the greatest difficulty they got their ships before the wind, with scarce any sail set. The gale continued to increase until midnight, by which time the wind had veered from N.N.W., where it began, to the N.E., and in an instant it was succeeded by a calm, attended by a thick haze. This was of short duration, for in the space of a few minutes the storm burst from the S.S.E., and raged with redoubled fury. Had the squadron got under sail and proceeded to sea early, they would have had an opportunity of gaining sufficient sea-room before the storm came from the S.E. The first gust of this fresh hurricane laid the *Panther* on her beam-ends, when, the sea breaking over her, Captain Affleck ordered the mizen-mast to be cut away. This not relieving the ship, he ordered the main-mast to be cut away likewise; it broke below the upper deck with such force that it tore it up, and the mast and rigging hanging over the side, continued to encumber the ship for a considerable time, until a heavy sea cleared them. The ship then righted, and the reefed foresail having withstood the violence of the gale, by means of it they got back in fourteen fathoms water, and there let go the sheet anchor; but not bringing up, they cut away the fore-mast, the fall of which carried away the bowsprit, when the ship came round, and in this manner rode out the storm. The *America*, *Midway*, and *Falmouth* were dismasted, and, after much distress, came to an anchor near the *Panther*. But it did not fare so well with the *Newcastle*, the *Queenborough* frigate, and the *Protector* fire-ship, who, scudding before the S.E. gale, mistook their soundings, and drove towards the shore without endeavouring to come to an anchor. The roaring of the wind prevented them from hearing the noise of the surf till it was too late. All three came ashore about two miles south of Pondicherry. Of their crews only seven perished, who were dashed overboard by the violence with which the ship struck when they took the ground. A more miserable fate attended the *Duc d'Acquitaine*, the *Sunderland*, and the *Duke* store-ship. Their masts withstood both hurricanes, but they were driven back by the S.E. tempest, and were under the necessity of anchoring; when, bringing up with all their masts standing, they broached to, and either capsized or foundered. The crews, in number eleven hundred, perished, except seven Europeans and as many lascars, who were next day picked up floating on pieces of wreck.

On 21st October 1763, a cyclone occurred at Madras, which lasted 14 hours; all the ships driven on shore were stranded.

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On the 21st October 1773, a violent hurricane visited Madras. It began at N.W., and ended with the wind easterly. (It must have travelled S.W., and the vortex passed south of Madras.) The men-of-war put to sea early, but all the vessels that remained at anchor were lost, with the crews.

The next hurricane of which we have to notice, is that of 1782. The weather had been threatening, and when it came on to blow, on the 20th October, the boats belonging to Sir E. Hughes' squadron (then in the roads) were on shore with their crews, on duty. The gale commenced at N.W., and every vessel that could bear canvas, put to sea. Most of the men-of-war boats put off to their ships, which were getting under weigh, and were reached with difficulty by the larger boats, and some of the smaller; but some boats were unable to reach their vessels, and were lost. The *Superb* was dismasted, and the *Exeter* was almost rendered a wreck. Sir Edward Hughes was obliged to shift his flag to the *Sultan*. Both the *Superb* and the *Exeter* got to Bombay with jury-masts. The *Neckar* (a country vessel) lost her main-mast, and some vessels foundered at their anchors. The morning following the hurricane presented a sad spectacle,—upwards of a hundred small country vessels stranded on the beach, the whole remaining stock of rice in the warehouses washed away, famine raging, and pestilence threatening! For the ravages of Hyder had driven thousands from the country to Madras, where already there had been great suffering for want of food. Upwards of 1000 corpses were buried every week for several weeks, in large trenches outside the town. The Governor (Lord Macartney) used noble endeavours to mitigate the calamity, and set an example by sending away all his own horses and servants. Hyder was at Pondicherry, and the admiral's fleet gone! Ships, however, came in laden with grain from Bengal; Hyder Ali died in December, and the hopes of the British revived.

The records of the Madras Observatory notice a heavy gale on the 27th October 1797. The barometer did not fall below 29.465.

A hurricane occurred at Coringa and Masulipatam on the 28th October 1800.

On the 4th December 1803, H.M.S. *Centurion* (of 50 guns, bearing the flag of Admiral Rainier), on her passage from Trincomalee to Madras, experienced a violent hurricane, which left her with nothing standing but the bowsprit, and had nearly proved her destruction. The gale commenced about midnight; at 11 A.M. on the 5th, the wind flew round in a violent gust to the southward, and till 6 P.M. it was blowing a hurricane. H.M.S. was so severely strained, that she had 8 feet of water in her hold, and her upper-deck guns were obliged to be hove overboard. Jury-masts were rigged, and on the 11th the *Centurion* anchored in the Madras roads. H.M.S. *Albatross* was dismasted in the same storm, and put in at Negapatam to refit.

Madras suffered from another hurricane on the 10th December 1807. Fortunately there was only one vessel in the roads when the storm commenced, and she put to sea. To show the effect of the storm-waves, it may be mentioned, from the testimony of an eye-witness (Captain Biden) that the bottom of a ship of 800 tons, supposed to

have been burnt in the roads about ten years before (in 1797), was washed high and dry on the beach near Parry's office; the whole of her floor was perfect, with a large quantity of her ballast (pigs of iron kentledge). The devastation along the beach and in the town and suburbs of Madras was very great. It was during this hurricane that there occurred an extraordinary rise of the tide, which inundated the whole of Black Town.

Another very disastrous hurricane occurred on the 2d of May 1811. Providentially the fleet, with the troops for the attack of Java, had just sailed. The *Dover* frigate and *Chichester* store-ship remained in the roads; they parted, and were lost. Ninety country vessels went down at their anchors. Only two vessels that were in the roads when the hurricane set in, were saved, and these put to sea. During this hurricane the surf broke in 9 fathoms of water, four miles from shore!

On the 24th October 1818, Madras again suffered. The wind commenced at north, and, after increasing in violence, suddenly lulled, and as suddenly flew round furiously to south. This hurricane travelled west, and its vortex passed over the town. The barometer fell to 28.78.

On the 9th October 1820, there was a hurricane commencing at N.W., veering to W. and S.W. The barometer fell to 28.50. Here the cyclone travelled west, and passed to the north of Madras.

On the 30th October 1836, a gale set in from north. At 4 p.m. it blew a regular hurricane from N.N.W. and N. After an ominous lull of half an hour, it flew round with redoubled violence from the south, at half-past seven p.m. At this time the barometer was 28.285.

On the 29th October, at noon, it had been	30.050
" 30th October, at 6 A.M.,	29.940
" 30th October, at noon,	29.707
" 30th October, at 5 P.M.,	28.891
" 30th October, at 7.30 P.M.,	28.285
At midnight, when the gale broke,	29.415

A storm causing great loss occurred at Bombay on the 15th June 1837.

In November 1839, a hurricane occurred off Coringa, when a storm-wave laid the shore 8 feet under water. 70 ships and 700 people were lost at sea, and 6000 perished on shore.

In October 1842, there was a heavy gale at Madras, but hardly considered a hurricane.

In May 1843, another hurricane occurred at Madras. On this occasion the brunt of it was felt out at sea, and several vessels were lost. Those that remained at their anchors rode it out.

The next hurricane at Madras took place on the 25th November 1846; during it the pressure-plate of the Observatory anemometer broke, at a pressure of 40 lbs. registered; and the force of one heavy gust was computed at 57 lbs. per square foot! The large iron wind-vane of the Observatory was bent to a right-angle; and one of the flat piers on the Elphinstone bridge blown over. These formed the data for computation. The previous month there had been an unprecedented fall of rain (20½ inches in 24 hours). Had the hurricane set in before the soil had dried, not a single building or tree in Madras would have remained upright.

On 19th April 1847, a violent hurricane extended from the equator to Sind. It was severe at Ratnaghery; the Maldives were submerged,

followed by severe famine. The *Cleopatra* was lost in this.

A destructive storm occurred at Bombay on the 2d November 1854.

In July 1780, during a typhoon in the China Sea, about 100,000 people perished.

A tremendous hurricane, with an inundation caused by a storm-wave, occurred at Cuttack and around Calcutta, on the 30th November 1831.

On the 31st October 1831, 300 villages and 11,000 people were swept away in Lower Bengal by inundations, followed by a famine; and the loss of life was estimated at 50,000 souls.

On the 21st May 1832, 8000 to 10,000 people perished in the delta of the Ganges.

On the 8th October 1832, a furious storm and disastrous inundation occurred around Calcutta, followed by great sufferings at Balasore.—*Mr. Meldrum in Pro. Brit. Assoc.*, 1867; *Pharaoh's Gazetteer of S. India*; *Dr. Buist in Bo. Geo. Tr.*, 1856; *Piddington, Law of Storms*, p. 524; *American Expedition to Japan*, p. 137. See Cyclone.

HURTAL. Persulphuret of arsenic, orpiment. There are two kinds, viz. gobhari hurtal, in yellow flakes, used in oil-painting; one seer costs Rs. 1½. Tabki hurtal, greenish, crystallized, given by fakirs in fumigation. One ruttee of it is wrapped up in a leaf of muggar-bel, and smoked in a hookah. It is evident that the smoker only escapes dangerous consequences, owing to the heat volatilizing most of the arsenic; as it is, the little inhaled often makes the person senseless. Salt is then given to restore the senses. Thus employed, tabki hurtal is considered a most powerful aphrodisiac. It is also used in ointment; costs three rupees for one seer.—*Genl. Med. Top.* p. 137.

HURUT or Harat, a Persian wheel for drawing water from a well; a corruption of Ruhut or Arhut.—*Elliot, Supp. Gloss.*

HUSAIN ALI KHAN, KIRMANI, author of *History of the Reign of Tipu Sultan*, translated by Colonel W. Miles, London 1844.

HUSAIN - bin - ALI - ul - VAIZ, surnamed Kashifi. He translated the fables of Bedpai from the Arabic of Ibn Makaffa, and named them *Anwar-i-Sobaili*, or *Lights of Canopus*.

HUSAIN GORI, the first of the Gori dynasty, succeeded to the throne of India in A.D. 1157 (other authorities say 1151 or 1155), by deposing Khusru Shah, the 13th and last of the Ghaznavi kings. Mahmud, the nephew and successor of Shahab-ud-Din, was the fifth and last of the Gori dynasty. He imparted little influence on India. He had attacked the king of Kharrasm at Takash, and subdued the Ghikar tribe; but in A.D. 1206, while returning to Ghazni, he was assassinated by two of his own tribe,—according to Orme in 1212, and another authority gives 1214.

HUSAINI. HIND. A kind of grape, the large sweet kind that are packed in boxes, and sent from Kabul in the cold season.

HUSAINI BULBUL, also called the Shah-bulbul, is of the sub-family *Myagrina*, and is known also as the paradise fly-catcher. It is of a chestnut colour for many months, but becomes white in the breeding season, in its plumage does. It is a very graceful bird, with very long tail feathers, and it is a pretty sight to see it flitting from tree to tree; how the birds prevent the long tail feathers from becoming entangled in the thorny trees, is difficult to understand.

In Ceylon, the bird in its chesnut dress is called the fire-thief, and the white bird the cotton-thief; it is also called the sultana bulbul. Its colouring is chaste. Mr. Layard has often watched them, when seeking their insect prey, turn suddenly on their perch and whisk their long tails with a jerk over the bough, as if to protect them from injury. It is common about Madras. It is the *Tchitrea paradisi*, *Lin.*; and Europeans call it also the bird of paradise.—*Tennant's Ceylon*, p. 249.

HUSAN YUSUF of Lahore is the silicious frustule of one of the Diatomaceæ. It is of a pyramidal form with a convex base, and on each triangular face is a prominent rounded knot; these markings are not affected by acids, and remain after heating to redness. When heated in a reduction tube, it gives off a peculiar smell and combustible gas, showing that it is quite in a fresh state, otherwise it appears somewhat similar to a fossil. Husan Yusuf is collected in lakes and ponds in the hills around Srinuggur in Kashmir. It floats on the surface, and is skimmed off and dried.—*Powell's Handbook*, p. 320.

HUSANZAI. Between the extreme northern frontier of the Hazara district and the Indus, there lies a somewhat narrow strip of rugged and mountainous territory; this is inhabited by the Husanzai, who therefore dwell in Cis-Indus, that is, on the left bank of the river. They could number, perhaps, 2000 fighting men. The principal hill is known as the Black Mountain, from its dark and gloomy aspect. In the adjoining tract, within the Hazara border, lies Western Tournouli, the fief of a chief politically dependent on the British.

HUSBANDRY, Agriculture, Tillage.

Zarâat; Fallahat, ARAB. | Kheti bari, . . . BENG.

Amongst the Chinese, and with several of the races in India, husbandry is considered an honourable avocation; but Rajputs, Brahmans, and Mahomedans in India deem manual labour derogatory. Husbandry and silk-weaving were the earliest of the arts cultivated by the Chinese people. The former was introduced by Shin-nong, the immediate successor of Fo-hi, and the silk-weaving by an empress; and to both of these benefactors the Chinese perform annual sacrifices on their festival days. With them, husbandry is still highly honoured; and annually, at a grand festival in honour of the spring, the emperor ploughs and sows part of a field. The ancient Egyptians, Persians, and Greeks held games and festivals, mingled with religious ceremonies, at seed-sowing; and in England, formerly, the festival of Plough Monday was held, during which the plough-light was set up before the image of the patron saint of the village.

The Chinese annual ceremony at Pekin consists in ploughing a sacred field with a highly ornamental plough kept for the purpose, the emperor holding it while turning over three furrows, the princes five, and the high ministers nine. These furrows were, however, so short, that the monarchs of the present dynasty altered the ancient rule, ploughing four furrows, and returning again over the ground. The ceremony finished, the emperor and his ministers repair to the terrace, and remain till the whole field has been ploughed. The ground belongs to the temples of heaven and earth, on the south of the

city, and the crop of wheat is used in religious services. The rank of the actors renders the ceremony more imposing at Pekin, and the people of the capital make more of it than they do in the provinces. A clay image of a cow is carried to the spot, containing or accompanied by hundreds of little similar images; after the field is ploughed it is broken up, and the pieces and small images are carried off by the crowd, to scatter the powder on their own fields, in the hope of thereby ensuring a good crop. The heads of the provincial governments, the prefects and district magistrates, go through a similar ceremony on the same day. In Ningpo, the principal features of the ceremony consist in a solemn worship, by all the local officers, of a clay image of a buffalo, and image of a cowherd. The prefect then ploughs a small piece of ground, and he and his associates disperse on the morrow. They come together in another temple at dawn, where a series of prostrations and recitals of prayers are performed by the fathers of the people in their presence. So soon as this is over, the clay ox is brought out, and all the officers pass around it repeatedly in procession, striking the body at a given signal, and concluding the ceremony by a heavy blow on the head. The crowd then rush in and tear the effigy to pieces, each one carrying off a portion to strew on his fields.

In British India, until after the middle of the 19th century, the Kandh race sacrificed human beings to the earth goddess, with ceremonies identical with those practised by the Chinese and their clay bullock.

Most races have had some religious ceremonies at seed-time or harvest; and to the present day, amongst most of the Hindu races of British India, at the close of the ploughing and sowing season, either in the spring or autumn, the plough is worshipped. It is their Har-puja.

The Kaur-mundla of the Hindus in Northern India, meaning the closing of the furrows, is a name given to the day on which the sowing is completed, but also called Kaur-boji and Hariur, and in the north-west Dulia jhar or Pulia jhar, meaning the cleaning out of the sowing basket,—Kaur-boji meaning the filling of furrows. The day is a festival. The plough is decorated; the residue of the seed-corn is made into a cake, which is partaken of in the open field, and part of it given to Brahmans and beggars. It is the seed-cake of the farmers of England, mentioned by Tusser:—

'Wife, some time this week, if the weather hold clear,
An end of wheat sowing we make for this year:
Remember you, therefore, though I do it not,
The seed-cake, the pastic, the fermenty pot.'

The plough, the hoe, and from time immemorial the drill, have been the chief agricultural implements of the Hindus, of whom about 70 per cent. are engaged in husbandry. Their ploughs for breaking up new ground are very heavy, and are drawn by two to eight team of bullocks, as the nature of the soil demands; but one pair of bullocks, with a very light plough, suffices for cultivated land. In rice-fields buffaloes are used.

The plough of the Hindus for their lighter soils is a naturally crooked branch of a tree, with an iron plate as a share or coulter. The cow is never put to labour by the agricultural Hindu, the only race who so employ it being the homeless wandering

Brinjari. In Malay countries the plough is usually drawn by one or two buffaloes, which are peculiarly adapted for the wet land culture of rice, to which the use of the plough is almost exclusively confined, the chunkal or large hoe being employed in turning up the soil in plantation culture. When the light plough of the Hindu farmer is used, there is a mere scratching of the soil, but it is finely pulverized by repeated cross traversing. This form of cultivation has been denounced by most of the Europeans who have written on the subject; and Mr. Robertson, of the experimental farm near Madras, constructed a light plough of the shape in use in Britain, to be substituted for that of wood which is now in use. But in all such substitutions the point which presents itself as difficult to meet, is the feebleness of the draught cattle. The plough of India is doubtless defective, but it is suited to the draught cattle at their command; and by going over and over the ground and making repeated stirrings, they eventually get down to a depth of 4½ inches, or about half an inch less than an average lea ploughing in Britain.

The Chinese have a machine which cuts up both the soil and the trefoil roots. It consists of a strong wooden frame with three cross bars, into which are fixed two rows of strong concave knives. A bullock is yoked to the machine, and, with the driver standing upon it, it is urged through the soil in all directions.

The drill husbandry of Mysore cannot be excelled. Their drilling-machine sows thirteen rows at a time, with the greatest regularity; and their bullock hoe, with blades which pass between the drills, eradicates weeds when the plants are a few inches high, and freely and effectually stirs the soil.

In British India, the arable land is held by three distinct tenures. Sir William Muir has described three broad distinctions in the title under which land was found by the British originally, to be owned or managed throughout various parts of India, viz. ryot occupancy or proprietorship, official zamindari, and village proprietorship.

The first signifies that the ryot is the hereditary occupant or owner of his own individual holding. The last, village proprietorship, signifies that one or more persons, or a body of coparceners, possess proprietary rights over all the lands (including waste) contained within the boundaries of their village or estate; village proprietors may be either talukdars, zamindars, pattidars, or members of a proprietary and cultivating brotherhood. At the time that the British assumed supremacy, ryot proprietorship prevailed in the south of India, official zamindari in Bengal, and village proprietorship in the N.W. Provinces.

It may be added, that on the N.W. Frontier are tribal tenures; and in Hazara, Peshawur, and partly in Dehra Ismail Khan, there is a periodical redistribution of the holdings amongst the tribes, known as Waish or Vaish. In Bannu, the island is held in tals, the area of the tribe; in darra, the holding of a group of families; and lich'h, one family holding. In Dehra Ghazi Khan, each member of the tribe holds his own share.

From the time of the census of 1871, husbandry of India has been attracting great attention, because the population has been increasing more rapidly than the means of subsistence. Also, two-fifths of the revenue of British India are derived from the land; and as the Govern-

ments of India and the cultivating tillers of the soil are to a great extent joint proprietors of the land, it is felt to be the duty of the state to instruct their partners, and within their state rights to prevent exhaustion of the soil. So far as experience of a century teaches, there are, taking the entire country, two bad years to every seven good ones; the average population affected in each instance is about twenty millions; and the result may accordingly be said to be equivalent to a famine over the whole country nearly twice in a century. Each of the great provinces, except Bengal, is visited with drought at intervals averaging eleven or twelve years, and with famines of exceptional magnitude at intervals of about fifty years. Bengal enjoys far longer periods of immunity, and, except in one or two localities, is wholly exempt from this visitation. Judging from the past, the largest population ever likely to be simultaneously famine-stricken is about thirty millions; and of these, 4½ millions will need assistance during the months of greatest distress, and an average of 2½ millions for an entire year.

How to prevent the soils of India being exhausted, is becoming an increasing subject of thought. With the exception of irrigated lands, little manure is employed in India. The principal food-crops are neither manured nor irrigated, and so long as moderately good soils were being tilled, a rude system of husbandry sufficed to meet the wants of cultivators; but now that by the pressure of population inferior soils are being taken up, it is necessary that an improved system of agriculture should be adopted. At present the farm cattle not at work are rarely if ever fed; the cows and calves are half-starved, and little milk is obtained. Draught bullocks are partially fed. But fodder grasses are never cultivated; and the want of power in the draught cattle is a great cause of defective tilling. It is acknowledged that with care produce can be greatly increased. Messrs. Lawes and Gilbert at Rothamsted, for 24 years grew wheat on unmanured and manured land. Unmanured land yielded only 12·4 bushels per acre, weighing 57·4 lbs. the bushel; land receiving yearly 14 tons of farm-yard manure yielded 34·1 bushels per acre, weighing 59·3 lbs. But the average produce per acre, on a series of observations extending over ten years, in several districts of the Bombay Presidency, was found to be as follows:—Wheat, 9 bushels, 585 lbs.; jvari, 10 bushels, 650 lbs.; bajri, 6 bushels, 390 lbs.

In the Dehra Doon the produce from wheat cultivation was found to average 1260 lbs. per acre; and at the Sind experimental farm, bajri (*Penicillaria spicata*) has yielded as much as 1420 lbs. per acre.

In the Nile valley the yield of wheat is from 8 to 20 fold; barley, 4 to 18 fold; maize, 14 to 20 fold; Sorghum vulgare, 36 to 48 fold.

The Famine Commissioners in their report (ii. p. 72) give the following as the produce of food-grains per acre in several parts of British India:—

Panjab,	11 bushels, or 0·20 of a ton per acre.
N.W. Provinces and Oudh, and Bengal, 13	„ 0·36 „ „
Central Provinces, . 8	„ 0·21 „ „
Berar, 6	„ 0·16 „ „
Bombay, excl. Sind and N. Canara, . 7	„ 0·19 „ „
Madras and Mysore, 11	„ 0·3 „ „

Mr. Morris, Chief Commissioner of the Central Provinces, in his report for 1872-73 (p. 6), gives the following as the average produce per acre:—

Rice.	lbs.	Wheat.	lbs.	Cotton.	lbs.
Raipur,	602	Sagar,	324	Raipur,	52
Bilaspur,	426	Hoshangabad,	267	Wardha,	40
Balaghat,	360	Jubbulpur,	600	Nagpur,	21
Chanda,	675	Narsingpur,	400		
Bhandara,	448	Raipur,	432		
Seoni,	654				

The area under cultivated crops in India is equal to one acre per head of the population, which increases at the rate of 1 per cent. per annum, equal to two millions yearly. To provide for this increase of numbers, two methods of increasing the production present themselves, viz. progressively to increase the area of cultivated land, and gradually to increase the produce from the land at present cultivated. The equivalent of the two methods are an extension of cultivation by two millions of acres annually, or an increased produce by one-tenth of a bushel annually from the present acreage. In coming to a decision over these two methods, it is necessary to remark that in British India, the best and most available land has long been occupied. The cultivable area still untouched is great, but is in places remote from population, and requiring much beyond the ordinary capital of an Indian cultivator to bring it into a state of production. The second method has therefore to be chiefly relied on. One bushel of increase per acre, obtained gradually in ten years from the present cultivated area, would meet the demand of a gradual increase in the same time of 20 millions of people. The produce would then have gradually risen from 10 to 20 bushels an acre.

The population in British India is at present, one part with another and one year with another, barely raising more than sufficient food for their requirement, and the Indian Government, in 1883, arranged with the railways to carry grain from one district to another at the lowest remunerative rates; because from certain districts it was being exported, while the population in some parts is even now pressing on the means of subsistence, and is increasing at a rate which is causing anxiety. The increase in Great Britain from 1851 to 1861 was 0.56 per cent. In India it has been stated at from 0.52 in the N.W. Provinces, 0.54 in Bombay, and 0.74 in Madras, and it has been supposed that the normal may be 0.5 and 0.6.—*P. P.* 1880, p. 29.

The population per square mile has been given as under:—

Oudh,	468	Berar,	129
Bengal,	397	Ajmir,	119
N.W. Provinces,	378	Assam,	99
Madras,	226	Central Provinces,	91
Mysore,	187	Coorg,	84
Panjab,	173	Burma,	31
Bombay,	131		

On the average, in all British India, 211 to the square mile,—agricultural, 56 per cent.; traders, 18 per cent.; labourers, 16 per cent.; professional and service, 10 per cent., the labourers being mostly employed on the land.

Between 1850 and 1880, 18 millions of acres of waste land had been brought under cultivation in the Madras and Bombay Presidencies, a quantity amounting to 80 per cent. of the area under cultivation in 1850. In the N.W. Provinces, from 1840

to 1880 there was an increase of 6 millions of acres, or 30 per cent. of the area under cultivation in 1840. In British India, the cultivated area for food-crops is a little more than one acre for each individual; in the Panjab, 0.76 of an acre; in the N.W. Provinces and Oudh, and in Bengal, 0.81; in Central Provinces, 1.8; in Berar, 1.75; in Bombay, 1.4; in Madras, 0.93; in Mysore and Burma, each 1 acre.—*F. Rep.* p. 73.

The Famine Commissioners, in their report of 1880 (i. p. 50), assuming the population of British India at 181,350,000, estimated the area under food-crop at 166,250,000 acres, yielding an out-turn of 51,530,000 tons of food. The ordinary consumption is estimated at 47,165,000 tons, leaving a surplus of 5,165,000 tons. The estimated consumption includes food, 37,980,000 tons; seed, 3,450,000 tons; cattle food, 369,000 tons; and wastage, 2,555,000 tons.

The famine of 1876-77 affected a population of 36 millions in the Peninsula of India, and in that year the crop in Bombay was short of the average by $1\frac{1}{2}$ million tons, in Madras by $3\frac{1}{2}$ millions, and in Mysore by 1 million tons.

The subject of Indian husbandry is one of much difficulty. The climates, the rains, and the soils of British India widely differ, and demand from the husbandman the most varied treatment. The lands in the deltas of the Ganges and Indus are annually strewed over with the fine silt which the floods of these rivers bring down in their course from the Himalayas, and cereals and the great millets are grown with little labour; and by varying the crops, the soil in those districts is made to yield three crops in the year. The great volcanic tract of the Dekhan, in provinces reached by the moist winds and rains of the south-west monsoon, and covered for ten and twenty feet deep with the regur or black cotton soil, from unknown times, has yielded once a-year, without manure, one luxuriant crop of wheat, sorghum, or cotton, grown in the open fields, without other care than the ploughing, sowing, and reaping.

The earth nowhere else yields agricultural produce in return for so little labour as in Lower Egypt, and gives back the seed so plentifully. In the lands which the Nile overflows, when the water is partially withdrawn, the fellah, without previous labour, throws the seed from his boat into the wet mud. Their present yield of wheat is from 8 to 20 fold; of barley, from 4 to 18; of maize, from 14 to 20; of Sorghum vulgare (darrah), from 36 to 48 fold. A like fertility is repeated in the flats of the deltas of the Indus and the Ganges, where rice crops are grown defying the inundations.

In India, crops known as the kharif are sown from the latter part of May and beginning of June to the early part of August, and are reaped from the latter part of October to the early part of December. And in districts watered by the N.E. monsoon and winter rains, rabi crops are sown from the latter part of August to the early part of November, and are gathered in the spring from the end of February—March to the beginning of April, being brought on by the heavy dews and cool nights and winter showers that prevail during the cold-weather months of India.

The Rice varieties of the Peninsula of India are sown and ripen at different periods. Some of them are sown in July, but most in August. Some

ripen in four months in November, some in five months in December, and some in six months in January or February.

Of the *Oil-seeds*, *Sesamum orientale* is sown in May and gathered in August, and *Arachis hypogea* is sown in September and gathered in February.

Of the *Pulses*, *Lablab vulgaris*, *Cajanus indicus*, *Phaseolus radiatus*, and *Dolichos catianga* are generally grown on lands depending on the natural rains, and their seeds are sown along with the millets. *Phaseolus mungo* and *Ph. max.* are sown in July and gathered in January. *Cicer arietinum* is sown in October and gathered in March. *Dolichos cultratus*, *Phaseolus aconitifolius*, and *Pisum sativum* are sown in December and gathered in February.

For *Millets*, the ground is ploughed up, and the seeds sown broadcast, in July or August, and reaped in November or December,—

Panicum miliaceum, *Willde.*, or varagoo, in six months;

Penicillaria spicata, or cumboo, in four months;

Panicum miliare, or shama, in three months;

Sorghum vulgare and its allies ripen in five months;

Setaria Italica, or tennay, in four or five months.

In Kandahar, the spring or rabi harvest produces wheat, barley, pulses, beans, lentils, madder, etc. The autumn or kharif harvest crops are maize, pulse, rice, beans, carrots, turnips, egg-fruit, beetroot, love-apple, tobacco.

In most parts of Afghanistan and in the extreme N.W. of India the crop sown in the end of autumn, and reaped in spring, consists of wheat, barley, *Ervum lens* (addus), *Cicer arietinum* (nukhud), with some peas and beans. The other crop is sown at the end of spring, and reaped in autumn, and consists of rice, *Panicum Italicum*, and *P. miliaceum*, *Sorghum vulgare*, *Penicillaria spicata*, *Zea mays*, and *Phaseolus mungo*.

The former, the spring harvest, is the most important in the countries west of the Suliman range. The latter, the autumn harvest, called by the Afghans *Paniyeh* or *Tirman*, is on the whole the most considerable. But there are modifications, according to climate. In the Hazara country, and also in all the coldest parts of Afghanistan and the neighbouring states, they sow their only harvest in spring, and reap it in the end of autumn.

In the Kharoti (Karoti), the Kattiwaz, and some other elevated countries in that neighbourhood, they sow their only crops at the end of one autumn, and reap it the beginning of another.

In Bajawar, Panjkora, in the country of the Upper Momunda and that of the Utman Khel, wheat is the principal grain sown, and their most important harvest is that which is reaped in summer.

In Peshawur, the Bangash, Jaji, Daman, and Isa Khel countries, the harvests are nearly equal; but in the eastern countries, that which is reaped in autumn is the more important. Wheat is the chief food of the people, though in several parts the millets, *Panicum*, *Sorghum*, and *Penicillaria spicata* are also made into bread. Indian corn heads are eaten roasted as a luxury.

About towns the food-grains mentioned are largely supplemented by their pälæ harvest, of musk melons, water melons, various kinds of cucumbers, pumpkins, gourds, grown everywhere

in open fields like grain. And in the gardens are grown carrots, turnips, beetroot, lettuce, onions, garlic, egg-plant, spinach, and greens of all kinds, cabbage, cauliflower. Barley is given to horses, and turnips are sown for cattle.

Rice is grown in most parts of Afghanistan, but in very different quantities. In Swat and Peshawur it is most abundant.

Berar is a province in the centre of the Peninsula, which receives the rains of the S.W. monsoon from June to August, and the winter rains of December and January, and its seed times and harvest times are as under. The plants with an asterisk (*) are irrigated:—

	Sown.	Harvested.
<i>Abrus precatorius</i> ,*	June	November
<i>Allium sativum</i> ,*	November	March
<i>A. cepa</i> ,*	"	"
<i>Cajanus indicus</i> ,*	June	Jan., Feb.
<i>Capiscum annuum</i> ,*	June	January
<i>Chavica betle</i> ,*	May	in a year
<i>Cicer arietinum</i> ,*	October	February
<i>Convolvulus batatas</i> ,*	September	February
<i>Coriandrum sativum</i> ,*	June	January
<i>Crotalaria juncea</i> ,*	June	October
<i>Curcuma longa</i> ,*	July	January
<i>Ervum lens</i> ,*	October	January
<i>Gossypium indicum</i> ,*	June	January
<i>Hibiscus cannabinus</i> ,*	June	Nov., Dec.
<i>Indigofera tinctoria</i> ,*	June	August
<i>Lathyrus sativus</i> ,*	October	January
<i>Linum usitatissimum</i> ,*	October	February
<i>Morinda citrifolia</i> ,*	June	in 3 years
<i>Nicotiana tabacum</i> ,*	July	December
<i>Oryza sativa</i> ,*	June	Oct., Dec.
<i>Panicum pilosum</i> ,*	June	October
<i>Papaver somniferum</i> ,*	October	Feb., March
<i>Penicillaria spicata</i> ,*	July	October
<i>Phaseolus mungo</i> ,*	June	November
<i>Pisum sativum</i> ,*	October	January
<i>Ptychotis ajwain</i> ,*	June	November
<i>Saccharum officinarum</i> ,*	Jan. or May	in 12 months
<i>Sesamum indicum</i> ,*	August	January
<i>Sinapis ramosa</i> ,*	November	February
<i>Sorghum vulgare</i> ,*	May, July	July, Dec.
<i>Triticum aestivum</i> ,*	November	February
<i>Zea mays</i> ,*	June	September.

In India, diseases and wild beasts cause heavy losses to the agriculturists. On this form of loss the Mysore Administration Reports for 1873-74 to 1875-76, have shown the losses in cattle sustained by their owners,—

	1874-1875.		1875-1876.	
	From Sickness.	By Wild Beasts.	From Sickness.	By Wild Beasts.
Cows,	33,440	1,522	42,843	1,299
Bulls or bullocks, .	24,555	1,041	33,089	921
Male buffaloes, .	5,450	279	8,971	246
Female "	12,575	414	16,979	381
Sheep and goats, .	67,129	1,681	55,181	1,685
Horses,	826	45	666	66
Asses,	1,797	43	1,396	31
Total,	145,772	5,025	158,625	4,629

In 1873-74, the cattle of all kinds numbered 2,911,684, and the deaths 138,759. In 1874-75, the respective numbers were 2,921,962 and 150,797, the increase of 12,038 deaths having been due to cattle disease in the Mysore and Hassan districts.

Irrigation.—The crops are liable to great injuries from insects and fungi, which will be found mentioned under Insects. Rats, locusts, hyenas, elephants, also cause losses; but that which is most dreaded is drought, for the rainfall fluctuates from year to year as much as 50 per cent. on either

side of the average, and failure of the rains results in scarcity and famine. The rains on the seaward sides of the Western Ghats and of the Arakan Hills never fail, the inundations and the canals of Sind and Lower Bengal protect the crops from all fear of drought; but in Mysore, the Ceded Districts, Ongole, Orissa, Hyderabad, Rajputana, Oudh, N.W. Provinces, and the Panjab, the rains have often failed, and millions of the inhabitants and their cattle have perished. The Tamil, Teling, and Gond races have evinced much ingenuity in constructing tanks wherever the slope of the ground admitted, and the races along both banks of the Lower Indus have laboriously formed inundation canals. With water, in tropical countries, plants of some kind may be grown. But much injury results from profuse supply of canal water swamping the lands. Land is destroyed unless there be perfect drainage made before the irrigation is adopted. The water must be able to get out of the land as well as to get into it with equal facility. Of all the supplies, river water is the best, as it brings with it a large proportion of silt; after that comes water from tanks, then the natural rains; and worst of all are the waters of wells and canals, for they contain much saline matter in solution, and chiefly soda. Salts in undue proportion render soils sterile. Mr. Robertson of the Sydapet farm says that soil which contains more than a half per cent. of salts, capable of being washed out by water, cannot possibly be productive. Mr. E. C. Schrottky says that the remedy for this is subsoil drainage.

Manure.—Next to water in agricultural value comes manure. The Chinese, of all the eastern races, are the most successful appliers of manures, utilizing them from the animal, vegetable, and mineral kingdoms, and applying them in a skilful manner, growing green crops for manure, which they plough down into their fields, and using recent animal refuse in a greatly diluted state. Throughout British India, the husbandmen are thoroughly acquainted with the value of manures, both fresh and decomposed, but the quantity obtainable is barely sufficient for their garden cultivation. Even if all the cattle refuse could be had, it would still be insufficient; but in most parts, owing to the scarcity of firewood, dried cow-dung cakes are the chief fuel. Also, with every increase of irrigation, manure is necessarily more and more needed, the soluble parts of the soils being more easily taken up, and are more frequently so by the more frequent cropping. The soils of many parts of British India are thus in danger of becoming utterly barren. Learned men from ancient times have been warning agriculturists on this point. In the first century of the Christian era, L. Junius M. Columella, in a letter to Publius Silvinus, pointed out that the sterility of their fields is to be attributed to their own doings. Mr. H. C. Carey of Philadelphia has shown that in the States, in the beginning of the 19th century, 25 to 30 bushels of wheat per acre were to be got, but latterly only 12 bushels. In Virginia and Kentucky, tobacco was grown until the soil was completely exhausted, and had to be abandoned. In a late Settlement Report in the Hoshangabad district, it was stated that in the Nerbadda valley, fifty years before, the rate of produce had been tenfold, but only sixfold at the date of the report.

Liebig, in his letters on Modern Agriculture (pp. 176-77), remarks that 'there are fields that may yield without manuring, for 6, 12, 50, or 100 years successively, crops of cereals, potatoes, vetches, clover, or any other plants, and the whole produce can be carried away from the land, but the inevitable result is at last the same: the soil loses its fertility, the fields will ultimately be brought to a state of exhaustion, the corn will only yield an amount equal to the seed, the potatoes will no longer produce tubers, and the vetches or clover will die away after barely appearing above the ground.'

These remarks are admonitory to the cultivators, the State, and the people. If the land be only half tilled, and be starved as regards manure, the share of the produce falling to the State will appear large; but the more produce it can be made to yield, the more easily will the land-tax be paid. Throughout India the ground around the village site is always resorted to by the inhabitants, and tobacco is there the most frequent crop. It is almost the only open field that receives animal refuse, four-fifths of the cattle droppings being dried and used as fuel. The average daily weight of cows' droppings is 4 or 5 lbs. daily, equal to 15 cwt. per annum; two-thirds are consumed as fuel, excepting during the rains. How little the fields receive, is known from the fact that there is one head of horned cattle to every two cultivated acres,—plough cattle, milch cattle, and buffaloes. Even the small portion retained for manure is wasted, no care being taken to prevent loss by drainage or evaporation. Mr. Buck mentions that at Farrakhabad night-soil has been utilized for ages past, as much as Rs. 15,000 to 20,000 being paid there by the cultivators to the sweepers.

In the general non-use of manure, the prevailing practice has been to throw the exhausted fields out of cultivation for periods of years, after which it is again broken up into great masses by iron bars. Full crops are not immediately obtained. In the Chanda district, it has been observed that where fresh soil is broken up for rice cultivation, the ground can never be got into proper order during the first year, and the yield is less than in the old fields. In the second year the return rises to about an eighth above that of the old fields, and increases gradually year by year until the fifth, when it reaches 50 per cent. above the yield of the old fields. It then commences to decline, and in about another five years has subsided to the level of the old fields. Land yielding dry crops seems also to reach its highest point of fertility in the fifth year of cultivation, but it falls more slowly to the condition of old fields than is the case with rice lands, and in a field twenty years old will be more productive than one which has been twenty years under the plough. When a cultivator sees a field becoming sterile, he allows it to be fallow for from two to five years, in the meanwhile pasturing his cattle thereon; and when the land is again sown, it is found to give a yield equal to its neighbours.

Green manure, ploughed in, has several advantages. It saves transport, rapidly decomposes, saves all the constituents of the manure; while decomposing, raises the temperature of the soil, protects the soil from the effect of solar heat, prevents evaporation, retains fertilizing gases, and

pulverizes the soil. The jute and cassia leaves and exhausted indigo plants are largely utilized in this way. Bone-dust is only employed in places superintended by Europeans.

Progress.—The British have been very desirous of improving the husbandry of the people, and have succeeded to a small extent. Millions sterling were expended in experiments to improve the staple of cotton; much encouragement was given to the silk and lac industries; unsparing and successful efforts have been made to establish tea, tobacco, cinchona, hop, and caoutchouc plants; opium cultivation has been brought to the highest pitch of perfection; the indigo manufacture has attracted many Europeans, though the manufacture of the last two products has been left entirely to native skill; tobacco varieties have been introduced; an attempt was made to introduce the fine cochineal insect; a little has been done to introduce improved breeds of cattle and sheep; much has been done for fibrous plants; and by agricultural exhibitions, agri-horticultural societies, farms, fairs, and agricultural banks, forests have been protected, planting of trees encouraged; great canals constructed for irrigation; loans have been made for well-digging; while railways, harbours, and improved ocean steamers have aided in the distribution, and emigrants have been encouraged and protected. These have been regarded by the British rulers as their duties.

Ninety per cent. of Indian exports are raw products, and steady efforts have been made to improve the means of transit and distribution on rivers, canals, ocean ships, roads, and railways. In scarcities and famines, perhaps, no efforts can stave off the destruction of the cattle needed for carriage, and a meteorological department has been formed to watch and give warning of climatic changes. The countries adjoining Further India, still sparsely inhabited, can be looked to for years to come as food granaries, but early effort should be made to encourage and develop the arts. Railway workshops, spinning and weaving companies, tea, cotton, coffee, and cinchona planters have done much, but the fishermen need to have facilities afforded for salting their fish captures, which is the sole animal food that almost all the races eat; and the climates of the western coast of India and of Burma are inimical to cattle and sheep.

Much is still capable of being accomplished in the way of improving existing and adding new varieties of fruit and timber trees, root plants, vegetables, cereals, pulses, and millets, condiment plants, truffles, mushrooms, with herbage and fodder plants for cattle.

Trees should be planted in groves and lines, to afford shelter from drying hot winds. They are a powerful engine in the production of coolness and moisture, and their leaves furnish manure. Prizes and payments should be made to persons who successfully raise trees in exposed situations, for a tree cannot be raised by Government employes under three to five rupees. Sir George Campbell, when in the Panjab, issued an order that every man who cut down a tree should plant five in its place. The breed of stock, cattle, sheep, and goats could be further improved, and better varieties imported; and they may be persuaded to rear fowls of kinds, and to add to their stock by domesticating bees. The preservation of fodder crops by ensilage might be introduced, and greater care taken, in

storing manure, to arrange for the preservation of its fluid parts, under-draining being adopted to bring fresh soil under tillage.—*Sir Henry Elliot's Supplement*; *Mr. R. H. Elliot and Mr. F. C. Danvers in Jo. Soc. of Arts*; *Carnegy's Kachahri Technicalities*; *B. H. Baden Powell, Econom. Prod. of the Panjab*; *Manual of the Land Revenue Systems of India*; *E. C. Schrottky, Rational Agriculture*; *Mr. F. N. Wright, Agriculture in Cawnpore*; *Mysore and Central Provinces Administration Reports*; *Baron von Mueller's Select Plants*; *MacGregor*, pp. 35, 36; *Wils. Gloss.*; *Williams' Middle Kingdom*, ii. p. 109; *Ward*, p. 101; *Peschel on Man*, p. 492.

HUSE, a transparent fabric of Manilla, of which the shirts of the coloured population are made. It is made from the fibre of the *Musa textilis*.—*Oliphant*.

HUSKS, on which the prodigal son desired to appease his hunger, were the pods of the *Cerantonia siliqua*.

HUSN and **HASN**, pl. Hasnein, sons of Ali, a cousin of Mahomed, by Fatima, Mahomed's daughter. Husni Syud, a descendant of Hasnein.

HUSN - ABDUL, is a town between Rawal Pindi and Peshawur. It has a sacred tank, supplied by many rivulets, and crowded with fish. A stone there has a rude bas-relief, said to be an impression of a foot.

HUT or **Hoth**, a small Baluch tribe in the Dehra Ghazi Khan district.

HUT-GAR or **Hat-gar**, a weaver caste in the Canarese-speaking country about Belgaum.

HUT-HEELE or **Hathile**, one of the Panchpiri, or five noted saints of the lower orders of Hinduism. He is said to have been the sister's son of Ghazi Meean, and lies buried at Bahraich, near the tomb of that celebrated martyr.

HUT-HU, **SANSK.**, in Hindu asceticism, signifies the external means used to fix the mind upon the One Spirit. These means are, sitting in a particular posture, keeping the eyes fixed on the end of the nose, repeating a particular name, and many other practices equally ridiculous.

HUTTON, **MAJOR**, author of *Note on the Culture of Silk at Kandahar*; on the *Wool and Woollen Manufactures of Afghanistan*; *Zoology of Kandahar*.

HUTTON, **DR.**, a Bombay medical officer, author of a *History of the Kooria Moorla Islands in the Royal and Bombay Geographical Society's Journal*; *East Indian Marine Survey*.—*P. P.*

HUWANA, **CAN.**, the flower fish, occurs in a curious small lake of fresh water close to the sea, near Cundapur in N. Canara. They are considered a delicacy, and used to be sent by runners to Tipu Sultan. They are caught by a number of boatmen moving from one end of the lake.

HUZUR, **HIND.** A respectful form of address to persons of rank, equivalent to 'presence,'—the presence, the royal presence.

HUZURASH, name of the translation of the *Zendavesta* into Pehlavi, a mixture of Semitic and Iranian, made in the time of the Sassanides. Pehlavi was the language used by the Sassanian dynasty.—*Bunsen*; *Max Muller*. See *Honover*.

HWA-KEA-TSZE, the Chinese cycle of 60 years. The Chinese year commences from the conjunction of the sun and moon, or from the nearest new moon to the 15th degree of Aquarius. It has 12 lunar months, some of 29, some of 30

days. To adjust the lunations with the course of the sun, they insert, when necessary, an intercalary month. Day and night are divided into 12 periods, each of 2 hours.—*Gutzlaff's Chinese History*, p. 73.

HWANG-to-wang, and Teen-tsze, are titles which have been held by Chinese emperors. Wang is commonly translated king; the other emperor. See China, 684.

HWOH-FU, Chinese living Buddhas.

HWUI-HWUI KEAOU. CHIN. The Mahomedan religion.

HYACINTH, a mineral used as a precious stone, consisting of silica and zirconia, transparent, and of a red colour.

HYÆNINA, a sub-family of the Felidæ, digitigrade carnivorous mammalia, distinguished by having their fore legs longer than their hind legs, by their rough tongue, great and conical molar, or rather cutting-and-crushing, teeth, projecting eyes, large ears, and a deep and glandular pouch beneath the anus. In general form, hyænas resemble dogs more than cats; and Linnæus classed them with the former, to which they appear united by the *Lycaon pictus* of S. Africa. There is one species in India.—

Hyæna striata, Zimmer., *H. vulgaris*, Demarest.

Naukra-bagh, . . .	BENG.	Taras; Hundar, . . .	HIND.
Har-vagh, . . .	"	Lakhar-bagh, . . .	"
Kirba; Kat-kirba, . . .	CAN.	Lakar-bag'h, . . .	"
Korna-gandu, . . .	"	Lakra-bag'h, . . .	"
Rera of CENTRAL INDIA.		Jhirak of . . .	HURRIANA.

The striped hyæna is of a pale, yellowish-grey colour, with transverse tawny stripes, neck and back maned, and ordinary length is 3 feet 6 inches to root of tail; tail 17 inches. It prefers open country, and generally digs a hole for its den on the side of a hill or mountain, or lurks amongst ruins. It is quite a nocturnal animal, sallying forth after dark and hunting for carcases, the bones of which it gnaws, occasionally catching some prowling dog or stray sheep. It generally returns to its den before sunrise. Its call is very unpleasant, almost unearthly. The young are easily tamed, and show much attachment to their keepers or masters, uttering sounds not unlike human laughter.

The spotted hyæna (*H. crocuta*) and the brown hyæna, which is a third species of the genus, are restricted to Africa. Their jaws are enormously strong, and when they bite they hold on obstinately, and can with difficulty be made to let go their hold. The voice of the spotted hyæna when excited resembles a laugh, whence it is commonly known as the laughing hyæna. The hyæna and lion are eaten by the Arabs.—*Jerdon's Mammals*.

HYALÆA TRIDENTATA, Lam., of the seas of the E. Archipelago, has the power of expanding its keel appendices into the form of large, oval, semi-transparent leaves of a light green colour.—*Collingwood*.

HYALONEMA LUSITANICUM, the glass-rope; a vitreous sponge of the Japanese seas. It is small and cup-shaped, pierced through the centre by a number of clear glass fibres, twisted together into a column 8 or 12 inches long. It roots itself in the mud by a twisted wisp of strong flint needles, somewhat on the principle of a screw pile. So long as there were only Japanese specimens to study, which was top and which bottom, which the thing itself and which para-

sites growing on it, whether it was a sponge or a zoophyte, or something else,—could not be settled. But the discovery of the same or a closely-allied species in abundance, from the Butt of Lewis down to Setubal on the coast of Portugal, where the shark fishers call it sea-whip, has given savans specimens enough on which to make up their minds, and has added another form to the list of those common, strangely enough, to European seas and to those of Japan.—*Capt. St. John*, p. 77.

HYAT. ARAB. Life, said by Mahomedans to have been created on the 10th day of Maharram.

HYAT QALANDAR, also Baba Booden, or Bawa Booden, a Mahomedan devotee, who settled on the Baba Booden Hills, on the Nuggur district of Mysore. On his arrival or return from Arabia he brought with him some coffee berries, since which time the plant has continued to be grown in that district.

HYDASPES or Bedaspes, the ancient Greek names of a river of the Panjab, called in Sanskrit the Vitasta; it is the Jhelum or Behut of the present day.

HYDERABAD, in lat. 17° 21' 45" N., and long. 78° 30' 10" E., on the right bank of the river Mura, is the capital of an independent inland kingdom of the same name, in the centre of the Peninsula of India. The territory lies between lat. 15° 10' and 21° 41' N., and long. 74° 40' to 81° 31' E., and has an area of 98,000 square miles, with a population of 11,250,000; and since the 15th century, it has been under Mahomedan rulers of the Bahmani, Kutub Shahi, and Azof Jahi dynasties, the second of whom ruled from the adjacent fortress of Golconda, and was overthrown by Aurangzeb, 1687. The Hyderabad country is in the table-land of the Dekhan, from 1250 to 1800 feet above the sea, and is surrounded by British provinces. It has been formed by the preceding and present dynasties out of several nationalities, viz. part of Gondwana on the N.E., Telingana on the E. and S.E., Maharastra on the N.W., and the Canarese or Karnatica speaking country on the S.W. and S.; and the four languages of these races are current in their respective limits, that of the dominant Mahomedan race being the Urdu or Hindustani, with Persian as the epistolary language of the court.

It comprehends the seats of some of the greatest and most powerful ancient sovereignties of the Dekhan:—Kalyan, the capital of the western Chalukya and Bijala Raya dynasties; Devagiri or Deoghur, the capital of the Yadava; Warangal, that of the Kakateya; and the great Mahomedan principality of Kulburga, which subsequently split into the subordinate powers of Bijapur (the Adil Shahi), Ahmadnagpur (Nizam Shahi), Golconda (Kutub Shahi), Berar (Inad Shahi), and of Beder (Birud Shahi). In the tract lying between the Mysore, Hyderabad, and the Maharratta country, were several smaller chieftaincies, such as that of the Nawab of Banaganapilly, a Syud family in the east of the Ceded Districts; the Pathan nawabs of Kurnool, on the right bank of the Tumbudra river; farther west, the Reddi chief of Gadwal; the Maharratta ruler of Sundur, one of the Ghorpara family; the Kshatriya raja, Narapati of Anagunda, the representative descend-

ant of the great king Rama of Vijayanagar, who was overthrown by the combination of the Mahomedan kings of Golconda, Kulburga, Bijapur, and Ahmadnagar; the Pathan nawab of Shahpur, the Ghorpara chieftains of Ganjandergarh and Akalkote; and at Ghurguntah and Beder Sholapur are the descendants of Pid Naik, a Beder soldier, to whom Aurangzeb granted a small territory in the Raichore Doab, for the aid given at the siege of Bijapur.

The rulers of the reigning Asof Jahi dynasty have been:—

- | | |
|--|-----------|
| 1. Kamr-ud-Din, styled Asof Jah, Nizam-ul-Mulk, subahdar of the Dekhan. | 1713-1748 |
| 2. Nasir Jang, eldest son of Asof Jah, murdered by Pathans. | ... |
| 3. Muzafar Jang, grandson of Asof Jah, and nephew of Nasir Jang, killed during a mutiny of his troops. | ... |
| 4. Salabat Jang, third son of Asof Jah, deposed by his younger brother in 1761, and died in prison two years afterwards. | 1761 |
| 5. Nizam Ali, younger son of Asof Jah, | 1761-1803 |
| 6. Secunder Jah, son of Nizam Ali, | 1803-1829 |
| 7. Nasir-ud-Dowla, son of Secunder Jah, | 1829-1857 |
| 8. Afzal-ud-Dowla, son of Nasir-ud-Dowla, | 1857-1869 |
| 9. Mir Mahbub Ali Khan, Br., infant son (2½ years) of Afzal-ud-Dowla. | 1869- |

The founder of the present dynasty was a distinguished officer of Aurangzeb. He was a Turani noble, whose name was Chin Kilich Khan. He succeeded Daoud Khan in the government of the Dekhan. After various intrigues during the weak reigns of Ferokhsir and of the Syuds, Mir Hasan Ali and Mir Abdallah, after the assassination of Ferokhsir in 1718, in the reign of Muhammad Shah, Asof Jah, in 1720, when governor of Gujerat, revolted, overran Kandesh, and captured Asirgurl. He was subsequently appointed vizir, but, disgusted with the vicious courses of the emperor, he returned to the Dekhan, defeated Mubharaz-ud-Dowla, and in 1724 re-established the Hyderabad kingdom near Golconda, where the Kutub Shahi family had ruled till overthrown by Aurangzeb.

In 1748, Nizam-ul-Mulk died, aged 104 years. His second son, Nasir Jang, assumed the government; but Muzafar Jang, a grandson of Nizam-ul-Mulk, took the lead, declared himself subahdar of the Dekhan, and joined Chanda Sahib and Dupleix, and in 1749 fought and won the battle of Ambur. Various intrigues occurred, in which Nasir Jang formed friendships with the three Pathan chiefs of Cuddapah, Kurnool, and Savanore; but he was attacked by the French before Ginjie, where one of the Pathan chiefs shot him. On this Muzafar Jang was released from prison and declared Nizam. He joined Chanda Sahib and the French under Dupleix, but he was assassinated by the Nawab of Kurnool on his way to Hyderabad, in 1751, when M. Bussy declared Salabat Jang, the youngest uncle of the deceased, to be the Nawab of Arcot.

Salabat Jang alternately combined with and opposed M. Bussy, was deposed in July 1761, and was shortly after assassinated by his brother, Nizam Ali.

In 1763, Nizam Ali met the army of Madhava Rao, Peshwa, under Raghuba, on the banks of the Godavery, and was completely routed. From that time till the beginning of the 19th century the French and British influence alternated, until, under a treaty of date the 1st September 1798,

the British surrounded and disbanded the French battalions. Since the treaty of the 1st September 1798, under renewed treaties, the Hyderabad Government has subsidized a brigade of the British Indian army. It has consisted of all arms, and has varied in strength from above 4000 to over 15,000. In 1798 they numbered 6801; in 1820, 15,489; in 1867, 4494; and in 1882, 5683. To provide for their pay by the treaty of the 12th October 1800, the Nizam ceded all the territories he had acquired by the Mysore treaties of 1792 and 1799, yielding about 17,58,000 pagodas. These Ceded Territories comprise the collectorates of Bellary, Cuddapah, and Kurnool; and from 1800-1 to 1880-81, the receipts have been Rs. 47,47,53,951, and charges Rs. 16,24,65,997, net Rs. 31,22,87,954 in the 81 years, or annually Rs. 38,55,406. In addition to the subsidiary force, the Hyderabad Government has, since 1811, kept up another armed force, known as the Hyderabad Contingent. It had its origin in the inefficiency of the Nizam's troops, and has been commanded by European officers, some of whom were lent from the Indian army; but, after the treaty of 21st May 1853, the officers became entirely of the latter class, and until that change it was styled the Nizam's army. In 1811, the strength of its cavalry was 9000, and of the infantry and artillery 8000, with 25 guns and 20 European officers. From 1815, there has been a gradual reduction of the Contingent. In 1853-54, when the change to the present system was made, the strength was 9799, with 37 guns and 881 camp followers; and in 1880-81 the artillery and infantry numbered 5432, cavalry 2200, with 69 European officers, 20 warrant and non-commissioned officers, 16 guns, and 1040 camp followers. The total military force of the Nizam has been returned as consisting of 71 field and 654 other guns, 551 artillerymen, 1400 cavalry, and 12,775 infantry, besides a large body of irregulars. The stato is entirely enclosed within British territory, and, with its good police, a very small armed force is needed. After the third decade of the 19th century, from the want partly of financial skill on the part of Chandoo Lal, Peshkar-i-Dewan, and partly from his general extravagance and retention of large bodies of foreign mercenaries, the pay of the Nizam's Contingent fell into arrears, and the Nizam assigned the Raichore Doab and Berar valley to provide funds for the pay. Raichore was early restored, but during all the minority of Mir Mahbub Ali Khan, the Dewan Regent, Sir Salar Jung, Bahadur, strove to recover Berar. This province was administrated by Commissioners, under the Resident of Hyderabad. In 1871, it had 17,334 square miles, with a population of 2,231,565. In 1881, the population of Berar was 2,672,673 persons, and the population of the remainder of Hyderabad territory is estimated in the same table at 9,000,000.

Berar is, in the main, a broad valley running east and west, lying between the Satpura range on the north and the Ajunta range on the south. The area of Berar may be reckoned at a little more than 17,711 square miles. The principal rivers are the Tapti, the Purna, the Wardha, and the Pain-Ganga or Pranhita.

Of the Berar towns, Ellichpur is the largest, Oomrawati, Akola, and Akote (in the Akola district) follow.

The principal divisions of the people of Berar as to creed and caste were:—

Christians,	1,335	Mahar,	307,994
Brahmans,	65,754	Other Hindu castes,	871,457
Rajput,	44,133	Aborigines,	163,519
Kunbi,	834,174	Jains,	20,020
Wani,	67,071	Mahomedans,	187,555
Mali,	195,981		

The chief numbers of the other Hindu castes in 1881 were as follows:—

Teli,	75,552	Gopal,	4,904
Dhangar,	74,559	Khatik,	4,487
Banjara,	60,511	Dhor,	4,477
Mang,	46,366	Jakinkar,	4,347
Mahali (Hajam),	33,517	Manbhao,	4,111
Koli,	30,398	Kaikari,	3,103
Gaoli,	30,159	Bhat,	2,520
Wanjari,	27,495	Lodhi,	1,773
Chumar,	26,885	Bhamti,	1,693
Bari,	23,690	Madhaga,	1,595
Bhoi,	22,961	Bedar,	1,273
Gosawi,	13,013	Burud,	1,201
Rangari,	12,471	Berad,	330
Vidur,	11,747	Gujar,	967
Beldar,	11,494	Galak,	356
Gurao,	9,234	Kapu,	340
Nath,	9,113	Paai,	256
Hatkar,	8,605	Kahur,	247
Waddar,	7,596	Mang-garodi,	218
Pardhi,	5,834	Ramusi,	118

The Aborigines are detailed as under:—

Andh,	37,010	Koilabhute,	43
Arakh,	371	Korku,	28,450
Balai,	803	Lajar,	1,825
Bhil,	4,183	Moghe,	344
Gond,	64,817	Nihal,	2,483
Kolam,	12,163	Pardhan,	11,023

The Hindu religious mendicants are,—Byragi, Bharadi, Dangat, Gondhali, Gosain, Manbhao, Nath, Sanyasi, and Vasudi. The Mahomedan fakirs are of the tribes Kadari, Banawa, Madari, Chisti, Nakshbandi.

All of the *Bhil* race who live along the skirts of the Satpura range appear to have embraced Mahomedanism, though they do not intermarry with the purer Mahomedans.

The *Kshatriya* class contains mostly a set of very dubious pretenders to the honour of Rajput descent. Mahrattas of no particular family usually call themselves Thakur; even a Kunbi will occasionally try to elevate himself thereby; while the Purbho, Kayasth, and other castes of mixed origin and good social status are constantly invading the *Kshatriya* military order. The distinction is also claimed by the rajas of the Satpura Hills, who assert that they are Rajputs depressed by the necessities of mountain life, whereas they are Gond or Kurku elevated by generations of highland chieftainship.

The *Sudra* caste in Berar, as in Mysore, all eat together, although they do not intermarry. The Kunbi and Mali eat flesh, drink liquor moderately, and their widows may always re-marry if they choose, excepting the widows of Deshmukhs, who are high caste prejudices. The Koshti is a weaving caste. The Banjara are comparatively numerous in Berar; their occupation as carriers is gone, and during their transitional stage they gave a good deal of trouble to the police. The Dhangar are sheep farmers, and the Hatkar, one of their clans, still hold much land on the border of the Nizam's territory, and were until A.D. 1853 notorious for pugnacity and rebellion. The Bhoi has recently been supposed to belong to a

widely-spread primitive tribe; the Garpagari live by the profession of conjuring away hailstorms. Any one who has watched the medicine man at work has witnessed a relic of pure fetishism, possibly handed down from the pre-Aryan races and their earliest liturgies. The Vidur and Krishnapakshi are the same; they are descendants of Brahmans by women of inferior caste; and Krishnapakshi is only an astronomical metaphor for describing a half-breed, the term meaning literally 'dark-fortnight,' and referring to the half-darkened orb of the moon. The Mhar have been taken to be the same with the Dher, a very useful and active tribe. The Mang appear to be the lowest of all in the social scale. The paucity of the Khakrob or Bhangi, who are so numerous in Northern India, is a serious sanitary difficulty. The Kaikari are a tribe formerly well known for their thieving habits. Of the aborigines, the Gond, Korku, and Bhil are the only completely preserved specimens of tribes. The two first retain their languages, while the Bhil tongue seems to have become extinct very recently in Berar, its disuse being probably expedited by their general conversion to Mahomedanism. The Ramosi, a predatory race, speak Telugu in their families, and are doubtless from Telingana. The original Pardhan among the Gond answered to the Bhat among the Hindus, but many seem to have settled in the plains as a separate class of Gond.

The chief towns are Hyderabad, Secunderabad, Aurangabad, Beder, Mominabad or Amba Jogi, Ellichpur, Warangal, Oomrawati, and Nandair.

Mahomedans, though of the dominant class, are not numerous in any district of the Hyderabad dominions. They dwell in considerable numbers in Hyderabad, Beder, Kulburga, Aurangabad, Karinjah, and Ellichpur,—places where rulers formerly resided; but in other places they are few, and everywhere they look to state employ. They have no lands, but several of them have the state revenues in jaghir. Out of 158,721 of these religionists in Berar, only 1296 are professional. The Syuds of Kulburga and Gogi and Hyderabad seem impoverished; the Pathan, Moghul, Arab, Persian, and Habshi Mahomedans are soldiers, and those of Berar are noted for their idleness and profligacy, seldom taking to the plough.

The Godavery, rising on the eastern declivity of the Western Ghats, disembogues in the Bay of Bengal. The total length of this great river, along the Hyderabad border and through the territory, is about 600 miles, for about 200 of which it is navigable from June to February. The Wardha rises in the hills of Betal and Chhindwara. Near the junction of the Pan-Ganga with the Wardha, and in the valley of the latter river, there are coal-fields. Those which have been examined over a small area near Sasti and Paoni show an average of 40 feet in thickness.

Except in the city of Hyderabad itself, no effort or attempt had been made to educate the people of the Hyderabad Territories, though education is making enormous strides in Berar and in British Maharastra. There was no proper school met with in all the Editor's journeys, in 1866-70, amounting to about 7000 miles, and only occasionally a few lads, children of foreigners, were to be seen learning in a verandah the elements of the Hindi or Mahrati.

HYDERABAD.

The Dewan, Sir Salar Jung, in 1868, made changes in the administrative machinery, and five Sudder Talukdars or Divisional Commissioners were appointed, for Aurangabad, Bir, and Purbhani; for Nander, Naldrug, and Beder; for Nulgonda, Khunnum; for Lingsugur and Raichore; and for Indore, Meduck, Yelgundul, and Surapur. The first three commissioners on Rs. 1500 a month, and last two on Rs. 1000.

The people in the first two divisions speak Mahrati, the next two the Telugu, and the last are the Canarese districts of the Nizam's Territories. Each of the above fourteen districts is presided over by a talukdar on from 400 to 600 rupees a month, assisted by deputy talukdars, who control and superintend the work of naibs or tabaldars of talukas. The commissioners go on circuit within their respective jurisdictions during eight months of the year, spending the remaining four at some central locality. The commissioners communicate with the Minister through the Malguzari or Civil Secretariat. There is a separate department of police, with a Sudder Mohtamim or inspector-general. Immediately under his orders are placed five naib mohtamim or deputy inspector-generals, to whom the Zillah Mohtamim or the district superintendents are directly subordinate. Each district has its Zillah engineer. There is a Conservator of Forests, and chief inspector of the medical department.

HYDERABAD, in Sind, in lat. 25° 3' 5" N., and long. 68° 24' 51" E., was built in 1768 on the site of the ancient Patala or Patalene by Ghulam Shah, Kalhora. It was the chief town of the territories ruled by the Talpur dynasty, until 14th February 1843, when, after the battle of Miani (Meeanee), it surrendered to the British, and the capital was transferred to Karachi (Kara-chee). The Hyderabad country was conquered from the Talpur dynasty, Amirs of Sind, by a British Indian army under Sir Charles Napier. The ancient name of Hyderabad was Neroon or Nirun, and Abulfadh described it as almost equidistant between Dabul (Dewul or Tatta) and Mansura, Sehwan, or Mingara, the latitude of which is 26° 11'. Its territory is of great ethnic interest, having been a refuge of Aryan, Baluch, Jat, Moghul, Pathan, and Rajput races for centuries before the birth of Christ; and Assyrians, Bactrians, Greeks, Arabs, and Rajputs have ruled up to and within its borders. The territory is now a British revenue district, under the Commissioner of Sind, between lat. 24° 13' and 27° 15' N., and long. 67° 51' and 69° 22' E. The population consists of Mahomedans, 560,349; Hindus, 118,652; with other creeds and tribes, 44,882; total, 723,883. Of the Mahomedans, more than three-fifths, or 378,705, are Sindhi, chiefly Sunni of the Halpotra, Juniyo, Dul, Powar, Thebo, Sumro, Sand, Katiyar, and other clans, descendants of the original population converted to Islam during the Umayyad dynasty of Khalifas.

The Baluchi Mahomedans (128,785) are in a great number of tribes, the chief being the Rind, Bhugti, Chang, Talpur, Jatui, Laghari, Chandio, Kaloi, Khaso, Jakruni, Lashari.

Pathans are found chiefly about Hyderabad and Upper Sind, along with Bokhari, Matari, Shirazi, and Lekhiraji Syuds. Together they number 15,815 persons.

The Sind Memons were formerly Kachhi

HYDER ALI.

Hindus, who emigrated to Sind under the Kalhora rule, and devoted themselves to agriculture and cattle-breeding. The Khwaja are descendants of fugitives from Persia when their creed (the Ismaili heresy) was persecuted by Hulaku Khan. The Memons and Khwajas aggregate 13,000. Sidi, natives of Maskat (Muscat), Zanzibar, and Abyssinia, who until the British conquest were bought and sold as slaves. The Shikaris or Daphers of Tanda number 1353. They are Mahomedans, but they eat carrion, and are excluded from the mosques. Among Hindus the most numerous caste is the Vaisya or Baniya, aggregating about 85,000, and of these nearly four-fifths belong to the Lohano tribe, and the majority of Hindu shopkeepers and traders also belong to the Lohano caste. In their complex subdivisions, they are mixed up with the Mahomedans. Although wearing the thread, they become the disciples of Mahomedan teachers, assume their dress, eat meat, drink spirits, and disregard all the customs of orthodox Hindus with regard to receiving food from inferiors, etc. Their marriage ceremonies are so expensive that many of them remain single till late in life.

The canals begin to fill about May, in proportion to the annual rise of the Indus, and are again dry by October. None are perennial in the Tando deputy collectorate, and in Hala only one,—the Mahmuda.—*Imp. Gaz.* See India.

HYDER ALI, an officer of the Mysore Hindu sovereigns, whom he set aside and then ruled over the country as an independent prince. His great-grandfather, Muhammad Bahlol, came from the Panjab, and settled in the district of Kulbarga, about 110 miles S.W. of Hyderabad. He was accompanied by two sons, Muhammad Ali and Muhammad Wali, who both married in the Kulbarga district, but left it for Seera, in Mysore, where they were employed as revenue peons; and here Fattch Muhammad, son of Muhammad Ali and the father of Hyder Ali, was born, A.D. 1702. Fattch Muhammad fell in battle, leaving two sons, Shahbaz and Hyder, at the age of nine and seven years respectively. Hyder grew up wholly illiterate, but was a brave soldier, and, after the fall of Devanahully, he was promoted to the command of 50 horse and 200 foot. Hyder shared in all the wars in which Nunj Raj and Deo Raj were involved; and when Muhammad Ali and Chanda Sahib were striving for the sovereignty of the Karnatic, he assumed the Mysore Government, A.D. 1761, the raja Nunj Raj taking a jaghir of three lakhs of pagodas. Hyder Ali's great success was the taking of Bednore or Nuggur in 1763, in which he is said to have found twelve kror of rupees. Raja Nunj Raj died childless, and a distant relative named Cham Raj was selected by Hyder. Bartolomeo (p. 8) mentions that Hyder Ali in early life stood sentry at the west gate of Pondicherry.

Hyder Ali was severely curbed by the Maharrattas, and entered into an alliance with Nizam Ali to attack the British, but the allies were defeated at Changanra in August 1767, and again at Trincomalee. The war continued, however, and Hyder Ali, in March 1769, arrived within ten miles of Madras, but on the 4th April a treaty was concluded. Hyder Ali conquered Coorg in 1772, and in 1773 and 1774 he recovered all the territories, which the Maharrattas had seized. In 1775 he captured Bellary from Bassalut Jang. In

1776 he extinguished the power of Morari Rao and the independence of Savanore; and in 1779 he annexed all the dominions of the Nawab of Cuddapah. On the 21st July 1780 he invaded the Karnatic, plundered Porto-Novo, laid siege to Arcot, and on the 10th September 1780 totally destroyed the force of Colonel Baillie at Perambakum. Sir Eyre Coote arrived from Calcutta on the 5th November 1781. While Hyder was surrounding five forts, Coote captured Carungally and overthrew Hyder's forces in a general battle at Porto-Novo, on the 1st July 1781, on which Hyder's investment of Trichinopoly, and that of Wandiwash by his son Tipu, were abandoned. Coote met Hyder at Pollilore, but again, on the 27th September 1781, at Sholingur, Coote completely defeated Hyder, and compelled him to raise the siege of Vellore. Hyder Ali died, aged 80, on the 7th December 1782. His death took place in camp at Chittore, near Arcot, but was concealed until his son Tipu could arrive. At his father's demise, at the close of a virtual reign of thirty years, the army consisted of a hundred thousand well-trained men, with about five millions sterling of money in the treasury. He left at his death a compact kingdom, and was succeeded by his son Tipu, known as Tipu Sultan. He was interred at Seringapatam, and a dome was erected over the tomb.

HYDER MIRZA, DOGHLAT, author of the *Tarikh-i-Rashidi*, an active, bold, adventurous officer, who held high commands under the emperor Babar; and his book, the *Tarikh-i-Rashidi*, a history of Central Asia, shows that he was a learned and accomplished man. He was the son of Muhammad Husain Mirza, who was the eldest son of Hyder Mirza, Doghlat, Amir of Kashgar. Muhammad Husain Mirza married the younger sister of Baber's mother, and he was put to death at Herat, A.H. 914 (A.D. 1508), under the orders of Shaibani Khan.

HYDNOCARPUS ALPINUS. *W. Ic. tab. 942*. One of the natural order Pangiaceæ, the Maratatti of the Neilgherries, a very handsome tree with a beautiful foliage, common on the Neilgherries up to nearly 6000 feet, and at 1500 feet on Calcut Hills, Tinnevely, and in Ceylon. On the Neilgherries the wood is much used as beams and rafters for native houses; it answers as deal for general purposes, packing-cases, etc.; it splits readily, and is a good firewood. The tree flowers in July and August.—*Beddome, Fl. Sylv. p. 77*.

HYDNOCARPUS INEBRIANS. *Vahl*.

H. venenatus, Gaytner.

Kowtee, . . . MAHR. | Makulu, . . . SINGH
Moratti, . . . MALKAL. | Marra vattay, . . . TAM.

A large tree, growing in Ceylon on the banks of rivers up to an elevation of 2000 feet, also in Malabar, in Tinnevely, and Travancore. It is a common tree on the west coast, not so in the Coimbatore jungles. The tree is hardly found in the Bombay northern jungles on the coast; more frequently in those south of the Savitri river. The wood is not used for any purpose. Flowers small, white. Fruit used for poisoning fish. The seeds of the fruit afford the Thortay oil of Canara, called also Neeradimutu oil. It is a very valuable vegetable solid oil, of the consistence of ordinary hard salt butter, and is used as a remedy in scabies and ulcers of the feet, also internally.—*Thwaites; Voigt; Gibson; Wight*.

HYDNUM CORALLOIDES. *Scopoli*. A mushroom, called the Koho khur in Kashmir. It grows in the hollow trunks of *Pinus Webbiana*. When cooked, its taste is excellent. There are many European species.—*Von Mueller*.

HYDRANGEA, a genus of hardy shrubs. One species commonly cultivated for the sake of its beautiful flowers, is a native of China and Japan. Loureiro took it for a primrose, and called it *Primula mutabilis*; and Commerson subsequently named it *Hortensia*, in compliment to Madame Hortense Lepleaute. *H. hortensis* is the Guelder rose. It is from 'Udor, water, and Aggion, a vessel, in allusion to some of the species growing in water, and the resemblance the capsule bears to a cup.

H. paniculata is the Nori-nori of Japan; a gummy matter is obtained from its bark, by decoction, used in sizing paper.

H. Thunbergii, Siebold. Yan-siu-kiu, CHIN.; Amats-ja, JAPAN. A shrub of E. China, Japan, and Java, is used as tea, and called in Java tea of heaven.—*Sir J. E. Reed, p. 43*.

HYDRAOTES, the ancient Greek name of a river in the Panjab, the modern Ravi; known also as the Rhoas. Two separate words forming the Greek name are 'Udor and Raotes; its Sanskrit name is Airavati.

HYDRAULIC CEMENT, the finer kinds of lime and cement on the coast of the Peninsula of India are made from shells. A piece of ground about ten feet square is laid down even and floored over with clay; an upright pole is placed at each end of this, and a sheet stretched out with back stays spread between the poles, which are steadied with strings. On the floor a bed of shells and rice-chaff alternately, about ten inches thick and eight feet by six, is spread neatly out. Some firewood is placed along the windward side of this, and when the sea-breeze sets in the wood is kindled. As the heat extends to leeward, and the shells become calcined, the lime-burners draw off the fore parts of them with a stick, and so soon as they have cooled on the floor sufficiently to allow them to be handled, they are placed in a scoop basket, and the dirt and epidermis winnowed from them. The shells, now white and pearly, are next thrown into a small-sized vat partially filled with water; here they for some time boil from the effects of the heat and slaking. The whole in a short time settles down into a fine semi-fluid mass, which is taken out and slightly dried, and is now ready for use. A good hydraulic cement is formed of the blue clay of Madras and shell-lime. Bitumen or asphalt seems to have been employed in Babylon as a cement.

HYDROCERA TRIFLORA. *W. and A.* Water oleander. This is the Domuti of Bengal, the Noli me tangere, one of the Balsaminaceæ. It expels its seed at a mere touch. The Turks regard it as a symbol of ardent love.

HYDROCHARACEÆ, a natural order of floating or water plants; six genera with eleven species occur in the East Indies, viz. species of *Ottelia*, *Vallisneria*, *Hydrilla*, *Blyxa*, *Enhalus*, *Boottia*, and *Hydrocharis*. *Hydrilla verticillata*, along with similar plants, is employed by sugar refiners for covering the surface of their sugars, to permit the slow percolation of water. *Enhalus acoroides* has a sulphurous smell. Its fruit is eatable, raw, boiled, or roasted; if boiled, the nuts acquire the taste of boiled chestnuts. The natives

of the Moluccas make nets of the tough threads which remain after the putrified leaves; these nets are said to be very durable in sea water. *Blyxa octandra*, Rich., grows all over India; *Boottia cordata*, Wall., a plant of Prome and Taong-Dong. *Enhalus acoroides*, Linn. (*Acorus marinus*, Rumph., *Stratiotes acoroides*, Linn.), grows in the Konkans and Moluccas.

Hydrilla verticillata, Linn.

<i>Serpicula verticillata</i> , L. f.	<i>Udora verticillata</i> , Spreng.
<i>Vallisneria verticillata</i> , R.	<i>Hottonia serrata</i> , Willde.
Kurelee, HIND.	Jhangh, PANJ.
Jala, PANJ.	Punachu, TEL.

This, with other aquatic plants, is used by the sugar-refiners of Saharunpur for covering the surface of sugar, in order to allow the slow percolation of water when refining it. It is common in water in parts of the Panjab plains up to Peshawur. It is used east of Sutlej for refining sugar, but at Multan, west of that river, it is not obtainable.—*Stewart, Panj. Plants*, p. 241.

Hydrocharis cellulosa, H. B.

Ottelia alismoides, Pers.

<i>Stratiotes alismoides</i> , Linn.	<i>Damasonium Indicum</i> , Willde.
<i>Hymenotheca laxifolia</i> , Sults.	<i>D. alismoides</i> , R. Br.

It is the Pance-kula of Bengal, and grows in most parts of India.

Vallisneria alternifolia, Roxb., the Rusnojhanghi of Bengal, grows there and in the Konkans and Coromandel. *V. physicum*, Juss., is a plant of Cochlin-China.

Vallisneria spiralis, Linn.

V. spiraloïdes, Roxb. | *V. Jacquimiana*, Spreng.

A plant of Europe, America, and India.

HYDROCOTYLE ASIATICA. *J. Pennywort*.

Hydrocotyle rotundifolia, Wall.

Thulkuri, BENG.	<i>Munduka brummi</i> , TEL.
Kodagani, MALEAL.	<i>Bokkudu</i> , "
<i>Munduka purni</i> , SANSK.	<i>Pinna yelaki chettu</i> , "
Heen-gotu kola, SINGH.	<i>Babbasni eluka</i> , "
Vulluri kire, TAM.	<i>Elika ohavi kura</i> , "

A small herbaceous creeping plant with little purplish red flowers, a native of Africa and America, and in moist shady places all over Southern Asia. It has long been employed in medicine, its leaves applied to bruises, and its virtue in leprosy has been latterly again much lauded. An infusion of the toasted leaves is given to children in fever and bowel complaints.—*Ainsl.*

HYDROCYANIC ACID, Prussic acid. Several species of the rose order of plants contain a considerable amount of Prussic (hydrocyanic) acid; the oil of the common laurel and bitter almond is, owing to its presence, a virulent poison.

HYDROLEA ZEYLANICA. *Vahl*.

Nama Zeylanica, Linn. | *Steris aquatica*, Burm.

A herbaceous plant, grows in water and marshy ground in the East Indies. The leaves beaten into a pulp and applied as a poultice are deemed useful in cleaning and healing ill-conditioned ulcers in which maggots have formed.—*Voigt*.

HYDROPHIDÆ, the family of sea-snakes.

A principal habitat of sea-snakes is the ocean between the southern shores of China and the northern coast of New Holland. They frequent the seas that separate the islands of the Pacific, but they have never yet been found in the Atlantic.

They are found on all the coasts of the East Indies within soundings, and are supposed to live on sea-weed. Sir J. E. Tennant says he has sailed

through large shoals of them in the Gulf of Manaar, close to the pearl banks of Aripo. The fishermen of Calpentyn, on the west of Ceylon, live in perpetual dread of them, and believe their bite to be fatal. In the course of an attempt to place a lighthouse on the great rocks of the south-east coast, known by seamen as the Basses or Baxos, the workmen who first landed found that portion of their surface liable to be covered by the tides, honeycombed and hollowed into deep holes filled with water, in which were abundance of fishes and some molluscs. Some of these cavities also contained sea-snakes from four to five feet long, which were described as having the head hooded like the cobra di capello, and of a light grey colour, slightly speckled. They coiled themselves, like serpents on land, and darted at poles thrust in among them. The Singhaless who accompanied the party said that they not only bit venomously, but crushed in their coils the limb of any intruder. About the year 1834, a midshipman, the boatswain, and a seaman of one of H.M. war ships at Madras were all bitten by a sea-snake, and died.—*Tennant's Ceylon*.

HYDROPHOBIA. Dr. A. Gibson says the *Notonia corymbosa*, native name Wandur Rotee, is useful as a prophylactic in hydrophobia. It grows rather plentifully on the stony parts of the high hills near Jooner, and also in some parts of the Northern Dekhan, Kandesh, etc.

HYDROPHYLAX MARITIMA. Linn. A straggling herbaceous plant, native of the shores of Coromandel and Malabar, where it shows its pale lilac blossoms a great part of the year. The branches run over the sand, sometimes under the surface, and strike root at the joints. It answers well as a sand-binding plant where the sand is moist.—*Roxb. i. p. 373*.

HYDROSAURI, or water lizards, live on the margins of springs and on low river banks. *Hydrosaurus salvator*, Lour., occurs in Bengal, Assam, Ceylon, Malacca. Tail compressed, fingers long, nostrils near the extremity of the snout. A black band on each temple, round yellow spots disposed in transverse series on the back; teeth with the crown compressed and notched. *H. marmoratus*, a huge lizard of the Philippines.—*Tennant*.

HYKSOS, or shepherd kings, were Semitic tribes from the N.E. of Egypt, that is Canaanites, associated with Bedouin tribes of Northern Arabia and the peninsula of Sinai. They held Memphis, but their stronghold was a fortified camp on the border of the Syrian desert.

HYLOBATES AGILIS, the gibbon, one of the Simiade, occurs in the Malay Peninsula, and several other species in the Archipelago.

Hylobates Hoolook, the Simia Hoolook, *Harlan*; *H. scyrites* and *H. coromandus*, *Ogilby*; *H. Hooloch*, *Lesson*, a native of Assam, Sylhet, Cachar, and Khassya Hills. Its howlings are very extraordinary.

Hylobates Iar, *Homo Iar*, Linn.; *Simia longimana*, *Schreb.*; *S. albinana*, *Vigors* and *Hors.*; *Le grand gibbon* of *Duffon*. A native of Tenasserim and Malacca, where it is known as the white-handed gibbon. The contrast which this animal offers with *H. hoolook* is very remarkable. The body is proportionally much shorter, and it is quite incapable of walking in the erect attitude commonly assumed by *H. hoolook*, always creeping forward when on the ground in a crouching position.

HYLOBII.

Hylobates Leuciscus, the silvery gibbon, the Wow-Wow or Wa-Wa, *Simia leucisca*, Schreb., *Moloch*, *Audeb.*, native of Malacca. The Wa-Wa, or long-armed ape, is the most beautiful of all the monkey tribe. The fur of this gentle little animal is grey; its face, hands, and feet are jet black; in features it more resembles those of the human race than the orang-outang.—*Low's Sarawak*, p. 80; *Jerdon*.

HYLOBII, a sect of ascetics mentioned by Megasthenes as living in the woods, clothed with the bark of trees, and living on fruits and leaves. *Hylobios* is a literal translation into Greek of *Vanaprashtha*, SANSK., dweller in the woods, which is the usual designation of a Brahman in the third stage of his life.

HYMENEA COURBARIL. *Linn.* The locust tree, gum-anime tree, or courbaril locust tree, is a fine colossal spreading tree, growing in the tropical parts of America, in Jamaica, and in Tenasserim, where it was introduced by Major Macfarquhar. The tree is easily propagated. The timber of the old trees is very hard and tough, and is in great request for wheel-work, particularly for cogs. The wood is so heavy that a cubic foot is said to weigh a hundred pounds; it takes a fine polish, and is used by cabinet-makers. When in a sickly state, the resin called Western anime, also W. Indian copal, exudes from between the principal roots. It is fine and transparent, of a red or yellowish-red colour, and in large lumps. It resembles amber, is very hard, and sometimes contains leaves, insects, or other objects imbedded in it. It burns readily, emitting a very fragrant smell. Dissolved in rectified spirits of wine, it makes one of the finest kinds of varnish.—*Eng. Cyc.*; *O'Sh.*; *Mason's Ten.*; *Voigt*; *Von Mueller*.

HYMENODYCTION EXCELSUM. Wall.

Cinchona excelsa, Roxb. Cedar wood.

Kala bachnak, DUK., HIND.	Burja; Burijs.	TEL.
Barthon; Thab, PANJ.	Chetippa,	
Sagapu inaram, TAM.	Bandaru, Pundaru?	

A very large tree belonging to the Cinchonaceae, common all round the foot of the Neigherries, and in the mountainous parts of the Circars, but chiefly in the valleys. The wood is firm, close-grained, of a pale mahogany colour, and very useful for many purposes; much used and esteemed for inside work, such as drawers, etc. The bark, Dr. Roxburgh informs us, possesses both the bitterness and astringency of the Peruvian bark, and, when fresh, even in a stronger degree. The two inner leaves of the bark possess great bitterness and astringency; the bark is used by the tanners, and also as a medicine among the Hindus, in cases requiring astringents. Dr. O'Shaughnessy analyzed the bark from the Botanic Garden of Calcutta, but could detect no alkaline ingredient. Nevertheless the trees of hilly regions may furnish the valuable desideratum. The stamina being contained within the tube, affords much ground for expecting the discovery of a febrifuge alkaline in this species.—*Roxb.*; *O'Sh.*

HYMENODYCTION OBOVATUM. Wall.

Karwai; Karwey, MAHR.	Malay tanah,	TAM.
Yella mala,		TAM.

This large, beautiful tree is not uncommon in the sub-Alpine forests from Canara down to South Travancore, up to elevations of 4000 feet. It is less common, however, than the *H. utile*; *Wight*. Dr. Gibson says this and *H. utile* grow on the

HYPERICUM PERFORATUM.

Bombay side of India, but that the wood of neither is fit for anything but fuel. Colonel Beddome says the timber is used by the natives for a variety of purposes, and is probably equal to that of *H. excelsum*.—*Wight*; *Gibson*; *Beddome*. *H. thyrsoiflorum*, Wall., grows at Rajmahal, Chittagong, and at Rangoon.—*Drs. Wight, Gibson, and Voigt*.

HYMENODYCTION UTILE. W. Ic. 1159.

Kurwey, . . . MAHR. | Pirunjolay maram, TAM.

This tree attains a large size, and the heart-wood is red. Dr. Wight was informed that it furnished the wood called bastard cedar, and he afterwards found two other trees similarly reported. Dr. Gibson says the wood of this tree is never used in Bombay except for firewood. The tree is common enough, in rocky slopes, mostly in or near thick forests. It does not stretch inland beyond the limits of the ghat ravines.—*Wight*; *Gibson*.

HYMENOPTERA, an order of insects characterized by the majority of them having stings. See Insects.

HYOBANS. The raja of Huldee or Hurdee in Ghazipur is of this conspicuous clan, which once held large dominions on the banks of the Nerbadda.—*Elliot, Supp. Gloss.*; *Jour. Beng. A. S.*

HYOSCIIAMUS NIGER. Linn. Henbane.

Bunj, . . . ARAB, PERS.	Sapht, . . . EGYPT.
Siekran, . . . "	Uoskuamos, . . . GR.
Dandura, . . . CHENAB.	Adas-pedas, . . . MALAY.
Bazr-bang, . . . "	Dentura, . . . RAVI.
Yang-chih-chuh, . . . CHIN.	Khorasani omum, . . . TAM.
Nau-yang hwa, . . . "	

The Seed.

Khorasani ajwain, HIND.	Tukhm-i-bunj-i-Rumi,
Bazr-ul-Bunj, . . . PERS.	PERS.

The henbane plant is a native of Europe and of Asia Minor, and in the Panjab Himalaya is frequent in waste ground near houses from 5000 to 10,000 feet. The seeds are officinal in India for their narcotic effects, and it is cultivated in several parts of India. In physiological action this plant and its preparations seem intermediate between belladonna and opium, combining great soothing and anodyne power with the property of dilating the pupil. An alkali has been obtained termed hyosciamia, which differs little, if at all, from atropia. A dry inspissated juice of the leaf was prepared by exposing the juice in thin layers on a shallow earthen vessel to the intense heat of the sun in April and May. Dr. O'Shaughnessy deemed this extract far superior to any imported from Europe or prepared in India by other processes. In three-grain doses its soporific and anodyne effects were most decisive, and its use rarely if ever followed by any headache or other unpleasant symptoms.—*O'Sh.*; *Stewart*; *Spry*.

HYPERICUM CHINENSE. *Smith*. Kin-sze-ta'au or Kin-sze-t'au, CHIN. A beautiful flowering plant of China.

HYPERICUM PERFORATUM. *Linn.* St. John's wort. Bassant of Ravi, Bassant dendlu of Beas. Common in the Kashmir mountains. In Arabian medicine it is recommended to expel intestinal worms and to cure piles, prolapsus uteri et ani. In European practice St. John's wort was regarded as a mild stimulant tonic, diuretic, emenagogue, etc. The dried herb boiled in alum water communicates a yellow or yellowish-red colour to wool, silk, etc. St. John's wort plants

all bear yellow flowers, with one exception from Cochin-China.—*Riddell; Stewart; Honigb.*

HYPHÆNE, a genus of dicotomous palms of Africa, but growing in India. *H. argun*, *Martins*, grows in Nubia. *H. coriacea*, *Gertn.*, the Doum palm of equatorial E. Africa and Upper Egypt, attains a height of 80 feet. It is common at Multan. *H. orinita*, *Gertn.*, of Egypt and Abyssinia. *H. thebaica*, *Mart.*, the Doum palm, or gingerbread tree of Egypt, grows at Okamundel and on Diu Island. Exceptional in the palm order from its branching trunk.

HYPHANTIDIUM SERICARIUM. *Bennett*. A lepidopterous insect of Australia. Its larvæ weave a beautiful silken web.

HYPHASIS, the ancient Greek name of the river of the Panjab, called in Sanskrit Vipasa. It is the modern Gharra.

HYPOLITE DESIDERI, a traveller who set out from Goa on the 27th November 1713, and reached Lahore in October the following year.

HYRCANIA, the hilly region south of the Caspian Sea, the country about Mazenderan, which has much forest. It is the Greek corruption of the word Korken or Gorghen, the name of a river which rises in the Kurdish mountains, traverses this region, and falls into the Caspian Sea.—*Ouseley's Trav.* i. p. 188, ii. p. 59.

HYSSOPUS OFFICINALIS. *W. Hyssop.*

Zufaiy yebus, . . . ARAB.	Hyssope, FR.
Zufu yabis, „	Isop, GER.
Ushnaz Daoud, „	

Used, in infusion, for coughs and asthma; also in toothache, uterine or vesicle affections, and indurations of the liver or spleen. Hyssop that cometh out of the wall, alluded to in 1 Kings iv. 33, was probably a lichen or moss, probably the *Gymnostomum fasciculare*, a moss common in the Holy Land.—*Powell*, i. p. 365.

HYSTRICIDÆ, a family of mammals of the order Rodentia. The sub-family Hystricinae embraces the animals familiarly known as porcupines, of the genus *hystrix* of Linnæus. They are rodents, whose covering consists for the most part of offensive and defensive armour, in the shape of spines or quills, instead of hairs.

Hystrix Bengalensis, *Blyth*.

H. Malabarica, *Sclater*. | Bengal porcupine, . . . ENG.

This is smaller than *H. leucurus*, the head and body being about 28 inches, and tail 8 inches. It is found in South Malabar, Lower Bengal, Assam, and Arakan; doubts, however, exist as to the identity of *H. Bengalensis* and *H. Malabarica*. Dr. Day states that he procured specimens of the orange porcupine from various parts of the ghats of Cochin and Travancore, and that the flesh of this kind is more highly esteemed for food than the common variety. The native sportsmen declare that the aroma from these burrows is quite sufficient to distinguish the two species.

Hystrix Leucura, *Sykes*. Indian porcupine.

<i>H. hirsuti-rostris</i> , <i>Brandt</i> .	<i>H. Zeylanensis</i> , <i>Blyth</i> .
<i>H. cristata Indica</i> , <i>Gray</i> .	<i>H. cauda-alba</i> , <i>Sykes</i> .
Sajru, BENG.	Sabi, Sayal, Sarsel, HINDU.
Yed, CAN.	Balendra, MAHR.
Holgu, GOND.	Dumal, NEPAL.
Saori, GUJ.	Yeddu pandi, TEL.

The white-tailed or Indian porcupine is found over a great part of India. It forms extensive burrows, often in societies, in the sides of hills, banks of rivers, nullahs, and tanks, or old mud walls. Its length is about 32 inches, tail 7 inches. In some parts of the country they never issue forth till dark; dogs take up the scent readily. The porcupine charges backwards on its assailants, with erected spines, and dogs frequently get severe wounds, the strong spines being driven deeply into them. The meat of the porcupine is white, tasting something between pork and veal, and is not bad eating.

Hystrix Longicauda, *Marsden*.

<i>H. alophus</i> , <i>Hodgson</i> .	<i>Acanthion Javanicum</i> ,
<i>H. Hodgsonii</i> , <i>Gray</i> .	<i>F. Cuv.</i>
Crestless porcupine, ENG.	O'e of LIMBU.
Sathung of LEPCHA.	<i>Achotia dumai</i> , NEPAL.

The crestless porcupine is found in Sikkim, in Nepal, at Darjiling, up to 4000 and 5000 feet. In the Eastern Himalaya it is about 24 inches long, tail 4 and quills 5½ inches. They are very numerous and very mischievous, committing great depredations in the edible root crops.

Atherura fasciculata is of the Tiperah Hills and southwards to the Malay Peninsula. The tail is much longer than in the true porcupines, and ends in a tuft of long bristles, and the spines of the back are less elevated.—*Jerdon; Mason*.

HYSDRUS, the name by which the Greeks designated the Sutlej river.

HYTA-BASHI, a leader of the Hyta troops, Turkish irregular cavalry, called Hyta along the valley of the Tigris and at Mosul, and Bashi-bazouk in Roumelia and Anatolia. They are collected from all classes and provinces. A man known for his courage and daring is named Hyta-Bashi or chief of the Hyta, and is furnished with tazkara or orders for pay and provisions for so many horsemen, from four to five hundred to a thousand or more. He collects all the vagrants and freebooters he can find to make up his number. They find their own arms and horses, although sometimes they are furnished by the Hyta-Bashi, who deducts a part of their pay until he reimburses himself. The best Hyta are Albanians and Lazes, and they form a very effective body of irregular cavalry. Their pay at Mosul is small, amounting to about eight shillings a month; they are quartered on the villages, and are the terror of the inhabitants, whom they plunder and ill-treat as they think fit. When a Hyta-Bashi has established a reputation for himself, his followers are numerous and devoted. He wanders about the provinces, and, like a condottiere of the middle ages, sells his services and those of his troops.

HYUGOR. BIOT. A mantle of sheep-skin or goat-skin.

HYUL, or Jiul, of the northern European nations, is the Hindu sacrauta, and is supposed in *Tod's Rajasthan* (i. p. 24) to be derived from Hya, SANSK., a horse, El, sun, whence *εππος* and *ἥλιος*. Ha appears to have been a term of Scythic origin for the sun; and Hiri, the Indian Apollo, is addressed as the sun. Hyul may be the Noul of France.—*Tod's Raj.* i. p. 24.

I

I. This letter of the English alphabet has, in England, four sounds. As an initial and medial letter, it has a long sound, as in iron, fine, isinglass; a second is short and acute, as in sit, infant, indigent; a third sound is that of the letter u, as in stir; and the fourth sound is close and slender, though long, like ee, as in fatigue, intrigue. The three first sounds are peculiar to the English language, but the last long sound, as of ee, is represented in all the tongues of the south-east of Asia.

IANTHINA, the violet snail, a genus of mollusca, of the family Haliotidae. There are six recent species, widely distributed in the four quarters of the globe. They are seen floating on the ocean, but are often driven on the shores by tempests. The beach at Madras is strewn with them after a gale. The Ianthina has occurred on the coasts of Britain. In warm climates it is very plentiful.—*Eng. Cyc.*

IARVINI. TAM?

Crown, . . . DUT., PORT. | Yarvanev, . . . TAM.

A Ceylon tree which grows tall and straight, from 20 to 45 feet high, and from 12 to 30 inches in diameter. It answers many purposes in ship and house work.—*Edge, Timber of Ceylon.*

IBADIYAH, a Shia sect of Mahomedans which was founded in Oman by Abdullah-ibn-Abad. They elect their own imam.

IBERIA. This ancient kingdom is the modern province of Kartelania in Georgia. Ptolemy describes it as bordered on the north by the Sarmatian mountains, to the south by a part of Armenia, to the east by Albania, and to the west by Colchia, the present Immeretia. He mentions many of its towns and villages. Strabo, who travelled in these countries, speaks of this being a flourishing and even luxurious state. In western emigration, the Iberians and Cantabrians preceded the Celts, and their language is preserved in the Basque (Biscayan).—*Porter's Tr. i. p. 110; Latham in Brit. Assoc. Journ., 1845, pp. 77, 78.*

IBEX. This name is given in India to several animals of the genus Capra or goat. C. Sibirica (I. Himalayana, *Blyth*) is the Himalayan Ibez, the Skeen, Skyn, Sakeen or Sikeen of the Himalaya, the Kyl of Kashmir, *Jerdon*. These are the names of the male; that of the female, in Tibet, is L'danmo. It inhabits Ladakh and Kashmir east to Nepal. It is agile and graceful in its movements. They are hunted and shot in the winter for the sake of the soft under-fleece, which in Kashmir is called Asali tus, and is used for lining shawls, also for stockings, gloves, and is woven into a fine cloth called Tusi. No wool is so rich, so soft, and so full. The hair is manufactured into coarse blanketing for tents, and twisted into hair ropes. The sportsmen of Southern India give the name of Ibez to the Neilgherry wild goat, *Hemitragus hylocrius*. See Goat.

IBI-GAMIN, a glacier in Eastern Tibet, in height 22,260 feet English = 20,886 French feet.

IBIS, a familiar name applied to species of birds of the tribe Culiostres; the Pelican Ibis is *Tantalus leucocephalus*, extremely common throughout India, Ceylon, and Burma. The Shell Ibis is the *Anastoma oscitans*, *Boddaert*, very

abundant in the lake and river districts. The Ibisine or true ibis, of which three species occur in India, and are there called curlews, from which, however, they differ in breeding on trees, and feeding their young till full grown.

The White Ibis is the *Threskiornis melanocephalus*, *Linn.*, and is found throughout India; the Warty Black Ibis, *Geronticus papilloeus*, *Temm.*, also of all India, feeds chiefly on dry land; and the Glossy Ibis, the *Falcinellus igneus*, *Gmelin*, occurs in vast numbers in India in the cold weather. It occurs throughout the whole world, and is very common in India. It is called in Tamil, Arroova nooken, literally sickle-nosed, from its long curved beak. The nest contains from three to five eggs, which resemble in size and shape a medium-sized hen's egg, but are of a dirty-white colour. The birds are white, with black head, feet, and neck, and have a long curved black bill. The head and neck are naked, and the tail-feathers of rather a rusty-brown colour; the lower sides of the wings, from the axillæ to the extremities, are naked, and the skin in the old birds is of a deep scarlet colour; in the young this is absent, although the part is naked. The young are fully fledged in March, and take to the wing in April.

The Sacred Ibis, *Ibis religiosa*, had great honours paid to it by the ancient Egyptians. It extends across the whole African continent in the same latitude, and is found on the west coast also.—*Jerd.*

IBLIS. ARAB. The devil, one who despairs of God's mercy.

IBN ASIR, author of the *Kamil-ut-Tuarih*, a general history of the Ghaznavites.

IBN BATUTA, born A.D. 1304, died 1377-78, was one of the great travellers of the Arab race. He spent 24 years (from 1325-49) in travelling throughout the east, from Tangiers across Africa to Alexandria, and in Palestine, Syria, and Arabia; down the east coast of Africa to Quilon; across the Indian Ocean to Muscat, Ormuz, Kish, Bahrein, and El Catif; through Central Arabia to Mecca and Jiddah; and again in Egypt and Asia Minor, and across the Black Sea to Caffa or Theodosia, and by Azov or Tanna, on past the hills of the Russians, to Bolgar on the Volga,—but not daring to penetrate farther northwards into the 'Land of Darkness.' Returning south to Haj-Tarkhan (Astracan), he proceeded, in the suite of the wife of the Khan of Kipchak, the daughter of the Greek Emperor Andronicus, westward to Soldaia and Constantiniah (Constantinople; he mentions Istanbul as a part of the city); whence, returning to Bolgar, he travelled on eastward to Bokhara, and through Khorasan to Kābul, Multan, and Dehli, where he remained eight years, 1334-42. Being sent by the Sultan Muhammad Taghalaq on an embassy to China, he embarked from Kinbaia (Cambay), and, after many adventures at Calicut (where he was honourably received by the Samari or Zamorin) and Hunawar (Onore), and in the Maldivé Islands, and Ceylon and Bengal, he at last took his passage toward China in a junk bound for Java, as he calls it, but in fact Sumatra. Returning from China, he sailed direct from the coast of Malabar to Muscat and Ormuz; and, travelling by Shiraz, Isfahan, Bussora, Baghdad, Tadmor, Damascus, Aleppo, Jerusalem, &c. (for the fourth time) Mecca, Egypt, and Tunis, at last reached Fez again, after an absence from Morocco of half his

lifetime. Subsequently he spent six years in visiting Spain and Central Africa, where he was the guest of the brother of a countryman of his own from Centa, whose guest he had been in China. 'What an enormous distance lay between these two!' he exclaims. He says that in his time Cairo was the greatest city in the world out of China, and that the finest trading ports he had seen were Alexandria in Egypt, Soldaia or Sudak in the Crimea, Koulam (Quilon) and Calicut in India, and Zayton (Chinchau) in China. He also describes Aden as a place of great trade, to which merchant ships of large burden resorted from Cambay, Tanna, and all the ports of Gujerat and Malabar. Among the productions of the Indian Archipelago, he describes gum-benjamin, aloes-wood, cloves, camphor, and sandal-wood; and enumerates also cocoanut palms, areca-nut palms, jack trees, orange trees, mangoes, and jamuns (*Eugenia jambolana*). Porcelain, he says, is made in China nowhere except in the cities of Zayton and Sinkalan (Canton). It was exported to India and elsewhere, passing from country to country until it reaches Morocco. The first detailed account of his travels was published in Europe in 1808. They were translated from the Arabic, with Notes by S. Lee, London 1829. He enumerates many large and populous towns, and gives a high opinion of the state of the country. He speaks of Madura as a city like Dehli, and that through the whole of Malabar, for two months' journey, there was not a span free from cultivation; everybody had a garden, with his house placed in the middle of it, and all surrounded by a wooden fence. And the ports were frequented by ships from China, Persia, and Arabia, and other neighbouring countries.—*Lee's Ibn Batuta; Birdwood's Report; India in the 16th Century; Tr. of a Hindoo; Yule's Cathay.*

IBN HAUKAL, an Arab traveller who visited India a short time after Masudi. He wrote the *Ashkal-ul-Balad*, or *Kitab-ul-Masalik-o-ul-Mamalik*, or descriptions of countries, in which occur notices of most of the Mahomedan kingdoms of his day. His real name was Muhammad Abu-l-Kasim, and he was a native of Baghdad. He left Baghdad A.D. 943 (A.H. 331), and he continued travelling till A.D. 968. He notices his obligations to Ibn Khurdadbeh, and he copied likewise from Istakhri. He finished his book A.D. 976, and it was translated in 1800 by Sir William Ouseley.—*Ind. in 15th Cent.; Elliot; Hist. of India.*

IBN HISHAM, A.D. 833 (A.H. 218), author of *Sirat-ur-Rasul*, translated by G. Weil, Stuttgart 1864. It contains the earliest and most authentic history of Mahomed, and was founded on a book by Ibn Ishaq.

IBN ISHAQ, died A.D. 768 (A.H. 151). He wrote traditions of Mahomed.

IBN KHALLIKAN. This well-known work has formed the basis of almost all that has been written on the personal history of remarkable men of Islam.

IBN KHURDADBAH, died A.D. 912 (A.H. 300), wrote a work on roads and kingdoms. He attained high office under the khalifa. He was a Zoroastrian. He is the first who makes mention of galangal and kamala, and he also mentions porcelain, sugar-cane, pepper, aloes-wood, cassia, silk, and musk.—*Elliot.*

IBN SAAD, A.D. 844 (A.H. 180), secretary of

Waqidi (Katib-ul-Wakidi), died A.H. 130-114. He wrote a life of Mahomed.

IBN-ZAIN-ul-TABARI, a physician of Baghdad of the early part of the 10th century.

IBN ZOHAR, the name of two distinguished Arab physicians, father and son, who flourished in Spain during the 11th and 12th centuries, and who are known to Western Europe by the name of Avanzoar. They were Jews by descent and profession. The father was born at Seville about A.D. 1072-73, and died there A.D. 1162. He was physician at the court of Cordova, and had charge of an hospital. His most celebrated book, the *Tasir*, is one of the most valuable in the possession of the Arabian physicians. It displays much originality and discrimination. It contains a compendium of medical practice, including many facts and observations not found in preceding writers. He also wrote on Calculus and on Regimen, and some of his books were translated into Hebrew and Latin. He was the teacher of Averboes. The son, 1114-99, also wrote several medical works, one of them on Diseases of the Eye. He died at Morocco, A.D. 1199.

IBRAHIM, founder of the Roushemi sect of Mahomedans; died at Cairo, A.D. 1529.

IBRAHIM KHAN of Gour had 7000 families of Taymuni under his rule; but about the year 1838 Yar Muhammad of Herat completely devastated the country which they occupied, and removed them to Herat, where he established some of them in the city, and some in the suburbs. In 1846, however, they took advantage of Yar Muhammad's absence on the Murghab, to decamp into the Persian territory.

IBRAHIM LODI, king of Dehli, was defeated at Panipat by Baber.

ICE.

Iis,	DAN.	Glacies,	LAT.
Ijs,	DUT.	Gelo, Caramelo, . .	PORT.
Glacé,	FR.	Teodt,	RUS.
Eis,	GER.	Hielo,	SP.
Yakh,	HIND.	Is,	SWED.
Ghiaccio,	IT.		

In many countries, the command of a proper supply of ice or snow for cooling water or other liquids in summer, has long been regarded as one of the necessities of life. There are even allusions to it in the Proverbs of Solomon:—'As the cold of snow in the time of harvest, so is a faithful messenger to them that sent him; for he refresheth the soul of his masters' (xxv. 13).

The Chinese in the north of their country form ice-houses, about Ningpo, 60 feet long, 42 feet broad, and 12 feet high.

Ice is of great importance to the Chinese, who depend much for their food upon the fish which are caught in their waters. They are enabled by its means to keep their fish during the hottest weather for a considerable time, and transmit them in this way to different parts of the country. Ice has become an article of commerce. This traffic commenced in Wenham Lake, about 18 miles from Boston, in the United States of America, and subsequently some of the Norwegian lakes have furnished abundant supplies.

Between 1874 and 1880, the imports into India ranged from 147,360 to 268,011 cwt., and value Rs. 2,11,675 to 12,51,902, from all quarters. The Rubattino Company tried to convey Alpine ice from Genoa to Bombay.

Ice is now largely made in India by machines. The Peninsular and Oriental Ice Company at Bombay, in 1868 made five tons at a cost of five pie the lb. Private manufacturers sell it at two annas a lb. at a profit. The smaller machines turn it out in cylinders, the larger machines in slabs. On the recommendation of Colonel (Sir George) Balfour, C.B., the Indian Government sanctioned an ice machine, value Rs. 7000, for each European regiment.—*Tomlinson; Fortune.*

ICELAND MOSS is the lichen (*Cetraria Islandica*), *Ach.*, common in the north of Europe and North America. It yields a nutritive starchy substance, sometimes employed to make bread and gruel.—*Waterston; Faulkner.*

ICELAND SPAR, a variety of calcareous spar found in rocks near Kåbul, and is extracted and broken into crystalline rhombohedral fragments, more or less opaque. It is employed by the natives as an astringent in ophthalmia, gonorrhoea, and other fluxes, in doses, internally, of 7 grains, and also externally as a local application. It is called Surma safed, or white antimony, from being thought to be similar to black antimony, the common tersulphide of that metal. Price 3d. per lb.—*Cat. Ec.*, 1862.

ICHNEUMON, a genus of insects which belong to the order Hymenoptera, section Terebrantia, and family Pupivora, in the classification of Latreille.

The species are many. They have a slender shape. The female, by means of its ovipositor, deposits its eggs into the body of a caterpillar, previously stupefied, so that the larvæ find food as soon as they are hatched, and devour the interior bit by bit. They are also often deposited into the larvæ of coleoptera, hemiptera, aphides, and weevils. The ichneumon forms small nests of clay, into which they deposit the infected insect.—*Eng. Cyc.*

ICHNEUMONS, a group of carnivora, spread over Africa and Southern and Eastern Asia. The Egyptian ichneumon very closely resembles the European species. It was one of the animals held sacred in ancient Egypt. It is of common occurrence throughout North Africa, and particularly abundant on the Nile, where it is said to attack the crocodiles, and where, without doubt, it destroys great numbers of eggs. The Ichneumons are all extremely fond of eggs, whether of reptiles or of birds. They break them very cleverly, by tapping one end on the ground; and through the small aperture thus effected they suck out the whole of the contents. There are several species of *Herpestes* in India, called Mongoose or Mungus; *H. Javanicus* of Java and Sumatra; *H. griseus*, *Geoff.*, of continental India and neighbouring countries; *H. Nipalensis*, *Gray*, of Nepal; *H. neyula*, *Hodgson*, of the Terni; *H. Malaccensis*, *Jerd.*, of Bengal; *H. monticolus*, *Jerd.*, hills of Eastern Ghats; *H. fuscus*, *Jerd.*, of Neilgherries; *H. vitticollis*, *Jerd.*, of Western Ghats; *H. brachyurus* and *H. exilis* of Malay Archipelago. The Egyptian species, *Herpestes ichneumon*, celebrated for destroying serpents and crocodiles, was called Ichneumon Pharaonis. See Mongoos.

ICHNOCARPUS, a genus of plants belonging to the order Apocynaceæ. *I. fragrans*, *Wall.*, is grown in Nepal and Kamaon. It has large handsome flowers; *I. Loureirii* is a native of Zanzibar.

ICHNOCARPUS FRUTESCENS. *R. Br.*

<i>Echites frutescens</i> , <i>Roxb.</i>	<i>Apocynum frutescens</i> , <i>L.</i>
<i>Shyama luta</i> , . . . BENG.	<i>Nalla tige</i> , . . . TEL.
<i>Shama-luta</i> , . . . "	<i>Illukatte</i> , . . . "
<i>Pal-vulli</i> , . . . MALEAL.	<i>Munta gojjanamu</i> , . . . "
<i>Nalla tige</i> , . . . TEL.	

Grows all over India. According to Royle, it is sometimes used in India as a substitute for sarsaparilla; 12 annas per lb.—*O'Sh.* p. 442; *Cal. Cat. Ec.*, 1862; *Don*; *Lindley*.

ICHTHYOCOLLA, a named derived from *ἰχθυς*, a fish, and *κόλλα*, glue, is translated isinglass, a word derived from the German Hausenblase, from Hausen, the great sturgeon, and Blase, a bladder, being one of the coats of the swimming-bladder of fishes, chiefly of the genus *Acipenser* or sturgeon, and of which the best qualities are exported from the rivers of Russia, flowing into the Black and Caspian Seas, but also from the Sea of Ural and the Lake Baikal.—*Royle*. See Air-bladder; Fish-maws; Isinglass; Sounds.

ICHTHYOPHAGI, a fisher race of the ancients, on the coasts of Persia, the Sir Matsya or Ser-mahli. Fish to this day is the staple article of food of the inhabitants on the sea-coast of Baluchistan. In the Shatt-ul-Arab, fish are caught and cured, and sold at one shilling the cwt.; for six months the people of Basra live on almost nothing else, and also from Basra to Hormuz, the sea-coast people principally live on fish; and manuscript dictionaries describe the bread or food called Mahi-abah or Mahi-ashnah, used chiefly among the people of Lar, as prepared from fish (more particularly a small kind found near Hormuz), dried by exposing it to the sun. Strabo and Arrian relate that the ancient Ichthyophagi made into bread the fishes, which they had dried and roasted in a similar manner. The region of the Ichthyophagi commenced at Malana, near Cape Arabah, and ended between the ancient Dagasira and the place now called Cape Jask, or more properly Jashk. Churchill's Collection of Voyages mentions that 'the coasts of Persia as they sailed in this sea, seemed as a parched wilderness, without tree or grass; those few people that dwell there, and in the islands of Lar and Callon, live on fish, being in manner themselves transformed into the nature of fishes. So excellent swimmers are they, that, seeing a vessel in the seas, though stormie and tempestuous, they will swimme to it 5 or 6 miles to begge almes. They cate their fish with rice, having no bread; their cats, hennes, dogges, and other creatures which they keepe have no other dyet.' Nieuhoff, who travelled in 1662, says that about Gambroon 'the common people make use of dates instead of bread or rice; for it is observable that the ordinary food of the Indians all along the coast from Basora to Sind is dates and fish dried in the air; the heads and guts of the fishes they mix with date-stones, and boil it all together with a little salt water, which they give at night to the cows after they come out of the field, where they meet with very little herbage.'—*As. Res.* ix. p. 68; *MacGregor*; *Taylor's Travels from England to India*, i. p. 266; *Churchill's Collection of Voyages*, ii. p. 230 (first ed.); *Cuseley's Tr.* i. p. 228; *Townsend's Outram and Havelock*, p. 297.

ICHTHYOPHIS GLUTINOSUS, an immense earth-worm, common in Sikkin. It is a native of the Khassya mountains, Singapore, Ceylon, and Java.—*Hook. Jour.* p. 26. See Reptiles.

ICICA INDICA. *W. and A.*

Bursera serrata, Wall. | *Schinus saheria*, *H. B.*
Schinus Bengalensis, *H. B.* | *S. Niara*, "

The Naylor tree of Assam and Chittagong, growing 70 feet high; timber close-grained and hard, as tough as oak, but heavier, and used for furniture by the natives. In South America are several species of *icica*, all of which yield a transparent fluid, resembling turpentine in many of its properties, and they might be introduced into India. In Guyana, *I. altissima*, *I. heptaphylla*, *I. heterophylla*, *I. decandra*; and *I. iccariba* in Brazil.

ID. ARAB., written *Eed*, a religious holiday of the Mahomedans. Of these, two *Eidein* are farz or absolute, being enjoined by texts in the Koran; these are the *'Id-ul-Fitr* and the *'Id-us-Zoha*. The *'Id-ul-Fitr*, called also the *'Id-us-Saghir* and *Ramazan-ki-'id*, is held on the 1st day of the month Shawal, in commemoration of breaking the thirty days' fast of the Ramazan. It is held with prayers and rejoicings and distribution of alms to the poor.

The *'Id-us-Zoha*, or *'Id-ul-Kurban*, or *Bakr-ee'd*, the meanings being the festival of the forenoon, of sacrifice, or the bull-festival, is observed in commemoration of Abraham's sacrifice of his son, whom the Jews and Christians say was Isaac, but Mahomedans say was Ishmael. It begins on the 9th of the 12th month, Zuhijja, with prayers and offerings, and is continued on the morning of the 10th with public prayers, after which a sheep, an ox, or a camel is sacrificed, and the meat of the sheep and oxen eaten by the offerers, or distributed to their friends and the poor.

IDA, one of the daughters of Daksha, who was married to Kasyapa.

IDAAN, called also *Merut* or *Murut*, a race in Borneo who inhabit the more hilly districts towards the north, in the vicinity of Kina Balou. They resemble the Kadyan, some of their tribes are near the capital; they are said to have sacrificed human victims, like the Kyans. The *Idaan* of different places go under different denominations and have different languages, but in their manners and customs they seem to be nearly alike. The name *Idaan* is in some measure peculiar to those of the north part of Borneo; the inland people of Passir are called *Darat*; those of Benjar, Bijaos; the *Subano* of *Magindanao* appear to be the same people. The *Idaan* are reckoned fairer than the inhabitants of the coast; this has given rise to an opinion, seemingly wholly unfounded, that they are the descendants of the Chinese. The custom obtained of arranging human skulls about the houses of the *Idaan* as a mark of importance. — *Journal Indian Archipelago*, 1849, p. 557.

IDA CHETTU, TEL. A very small variety of orange, growing in all the hilly country of the Circars, both cultivated and wild. Perhaps the original of the *Citrus naurantium*, Linn., *C. variatro*, Heyne, p. 57, musk orange, *Chota kichili*, HIND., *Kiri kittali*, CAN.—*Fl. Andh.*

IDAIN, *Idankai* or *Idiakai*, TAM., *Idagai*, KARN., the left side; the left-hand castes of the Hindus.

IDAIYAN. TAM. Cowkeeper. The cowherd race in the southern districts of the Peninsula of India. They have as their tribal titles, *Khone*, *Kone*, or *Konar*, meaning king, also *Karialan* meaning landlord, and *Servnakren* meaning captain; but those in the northern districts adopt that of *Pillai*. The race are very numerous, but take

a lower place in social life than the agricultural *Vellaler*, who generally take the title of *Mudali*.

IDIGA. KARN. A toddy-drawer; a caste who sell toddy, the fermented palm wine, etc., also employed as palanquin bearers.—*Wils.*

IDOLS.

Idole,	FR.	Imagen,	SP.
Bild, Gotze,	GER.	Vigraham, Salai, .	TAM.
Ebenbild,	"	Vikramu, Vigram, .	TEL.
But,	HIND., PERS.	Prattima,	"
Imagino,	IT.	Put, Surat,	TURK.
Idolo,	It., Sp.		

The idols of the Hindus are made of gold, silver, and copper, or their alloys,—one alloy of frequent use being that called *panchalaka*, of gold, silver, copper, tin, and lead; but iron, brass, crystal, stone, earth, cow-dung, and wood are also often employed, the red sanders wood and the woods of the *Cupressus torulosa*, *Macrotomia euchroma*, and *Melia azedarach*. Many of the idols in India are monsters, many are mere shapeless masses of stone with a smearing of red lead, or a log of wood without shape or form, or a stone from the river-bed; others, like the bull *Nandi* or *Basava*, the *vahan* of *Siva*, are beautifully-formed models of that quadruped. The forms of *Siva* and of his wife *Parvati* and of the cobra serpent are usually well portrayed, as also of the peacock in the *Saiva* temples. The horse is formed of wood, plated with silver and gilded; occasionally well-made figures of the elephant are to be seen.

The images made of gold are generally those of *Durga*, *Lakshmi*, *Radha*, *Krishna*, and *Saraswati*; they are kept in private houses, and worshipped daily, and weigh from one to four tolas.

The image of *Sheetula*, of 10 or 12 tolas, is often made of silver, kept in the house, and worshipped daily. Ward mentions that at *Kidderpur*, adjoining to *Calcutta*, was a golden image of *Puti-tupavuni*, 2 cubits high. Near *Sarampur* was a golden image of *Jagadhatri*, about 1½ cubits high. Very small copper images of *Surya*, and of *Siva* riding on a bull, are preserved in private houses, and worshipped daily.

The images of all the gods and goddesses may be made of stone, generally of a black, but some of a white colour; the greater number are placed in temples; a few small ones are found in private houses. All images of stone are worshipped daily; the greater number are of the *lingam*, or the various forms of *Vishnu*. A few exist of the *lingam*, nine or twelve cubits high. Throughout Lower Bengal and all the south of India, every village has its guardian idol, generally one or more rough stones smeared with red lead, and placed under an aged banyan or pipal tree. In one single street of *Calcutta* there are more images of *Krishna* and emblems of *Siva* than perhaps in the whole length of the *Doab*. A *lingam* at *Benares* requires six men to encircle it. The clay and composition images made in the vicinity of *Calcutta* for the annual festivals (some of which have a very splendid appearance, and are of large dimensions), after the ceremonies are over are cast into the river. The modern manufacturers of the deities are artisans in gold, silver, and other metals, stone-cutters, and potters. Some of the modern casts are handsome, but the modern sculptures are commonly contemptible. Some of the ancient Hindu sculptures are magnificent, and in minute ornamental and floral decorations almost unrivalled.

In Burma the images of Gaudama are made of wood, marble, and the precious metals. In Siam, Japan, etc., images are made of the ornaments, precious metals, etc., collected from the ashes of the funeral pile of a deceased person; and others again from the pulverized fragments of the bones kneaded with water into a paste, baked, and afterwards gilded.

Images of snakes are common. The idea of their curative virtues is very old in India: a Hindu attacked by fever or other diseases, makes a serpent of brass or clay, and performs certain ceremonies to its honour, in furtherance of his recovery. Such ceremonies are particularly efficacious when the moon is in the Nakshatra (mansion, sign, or asterism) called Sarpa or the serpent, called also Ashlesha. Dhanwantari is the Esculapius of the Hindus, but has not an attendant serpent like his brother of Greece; the health-bestowing Dhanwantari arose from the sea when churned for the beverage of immortality. He is generally represented as a venerable man with a book in his hand.

Every Hindu house has at least a picture; many have idols; and every man of the Vira Saiva or Jangam sect, of whom there are many millions in India, always wears the lingam in a silver or gold casket, suspended from his neck or tied round his arm. The lingam inside is a small stone cylinder embedded in the yoni. The ordinary lingam, of which there are millions in India, is a stone cylinder rising from the yoni, a stone platform marked with circular markings; usually in front of it is a figure of the bull Nandi in stone. Ganapati or Ganesa, with the head of an elephant and the body of a fat man, is an idol frequently to be seen. As the god of wisdom, he is worshipped at the beginning of every undertaking by almost all Hindus. When a Hindu boy or girl begins to read, they make a Ganesa in the form of a small cone of cow-dung, which they place on a purified spot, and ornament it with flowers and nāragam and red kanganu, and offer a sacrifice by burning camphor and frankincense, also offering betel-nuts and plantains, coconuts and jagari, then bow reverentially and pray for the god's aid. The pyramidal figure is then kept for a time or thrown into the water. Any person may see them.

In a Hindu temple, the idol is kept in the centre of the temple, called Sanadi. Daily the Brahman servants anoint it with oil, cleanse it with sikaia, wash it with water, then with curds, milk, lime-juice and honey, and coconut water. Before it the dancing girls of the temple, the devadāsa, dance and sing to music morning and evening. On certain festivals, the idol is taken from the temple in a palanquin or on a car, and made to perambulate the squares and the streets.

Idols are frequently objects of litigation, and sacrifices of human beings are occasionally made to them. In a village called Kishnagur, some 30 miles from Bikanir, there lived one Maya Ram, a Jat by birth, in whose house was an image of stone, which Maya Ram and his family used to worship. It was a tradition in the village that the idol had been kept formerly in several other houses, one after the other, but that all who worshipped it had come to a violent end; and Maya Ram one day was seen behaving very strangely before the idol, dancing frantically, says the report. He then forbade the other villagers to enter the house.

He seemed under the influence of some religious homicidal mania, attacking his kinsmen, and threatening to kill them unless they conformed to his worship of the stone image. He killed the child of his elder brother. Suddenly the contagion of madness seemed to seize the whole family: Maya Ram, with two male kinsmen and seven women, threw themselves into a well all together, and shouting 'Swarga chalo!'—Come to heaven!—the whole ten were drowned.

The Jain idols are usually naked figures of men and women, of gigantic proportions, often erect, but in every attitude. The Buddhist idol is usually Buddha or Gaudama, reclining, or sitting in the attitude of preaching. Some of the figures of Gaudama at the great Shooay dagon temple at Rangoon are of vast dimensions.—*Moor; Ward's Hindus; Tr. of a Hind.; Coleman.*

IDRISI or Al-Idrisi, the surname of Abu Abdullah Muhammad, author of the geographical work *Nuzhat-ul-Mushtak-fi-Ikhtirak-ul-Afak*. He was born at Ceuta, in Morocco, towards the latter part of the 11th century. He travelled in Europe, and eventually settled in Sicily at the court of Roger II. He describes the countries in the S. and E. of Asia.—*Elliot.*

IFTAH. ARAB. The evening meal of the Mahomedans during the Mabarrat.

IGHIR. ARAB. *Acorus calamus*.

IGNATIA AMARA. *Linn.* The K'u-shih-pa-tau of the Chinese. Ignatius bean, syn. of *Strychnos sancti ignoti*.

IGUANA.

Zib,	ARAB.	Manawak, Manuwak, MAL.
Iguana or Inguana,	ENG.	Ghoda-sala,
Lizard,		SANSK.
		Talla-goya,
		SINGH.
Ghorepore,	DUK.	Udumu,
Biyawak, Bewak, MALAY.		TAM.
		Udumbu,
		TEL.

Iguana is the popular name for species of reptiles of the genus *Varanus*, family Varanidae, order Sauria, of the section of scaled reptiles. Baron Cuvier classed them under his Iguaniens; others have arranged them under the Agamidae. *Varanus flavescens*, Gray, inhabits Bengal; *V. dracæna*, *Linn.*, Bengal and Agra, and also *V. nebulosus*, *Dum. et Bib.*

Varanus Dumerilii attains a length of 7 feet; it frequents the neighbourhood of houses, to rob hen roosts.

The Basilisk of the Eastern Archipelago is the *Basileiscus Amboiensis*, *Daudin*, one of the Iguanidae. *Messrs. Dumeril and Bibron*, in their *Erpetologie* (1837), treat of these reptiles under the name of Lizards, Iguaniens, or Sauriens Eunotes. In the catalogue of the specimens of lizards in the British Museum, the Iguanidae with the Agamidae constitute the tribe Strobilosaura.

The Iguana of India, generally found about old walls and ruinous buildings, is about two feet long; tail long, round, and tapering; back, tail, and throat are serrated; and its whole surface is covered with shining scales. The flesh is eaten by the Mahomedans of India, and in the West Indies it is salted and barrelled for exportation. In India the body of the dried Iguana is made into an electuary, with a certain portion of ghi, and used as a strengthening medicine in consumptive complaints. An animal oil is obtained from it. The Iguana of the Europeans of Ceylon, the Talla-goya of the Singhalese, is the *Monitor braccæna*, *Linn.* It is 4 to 5 feet long. The Singhalese and

Tamil races of Ceylon believe the tongue of the Iguana to be a specific for consumption, if plucked from the living animal and swallowed whole.—*Tennant's Ceylon; Faulkner; Eng. Cyc.*

IHRAM. ARAB. The dress worn by Mahomedan pilgrims at Mecca. See Harm. Lane says (*Mod. Egypt*, i. p. 131), during his performance of the required ceremonies in Mecca, and also during his journey to Arafat, and until his completion of the pilgrimage, the Muslim pilgrim wears a peculiar dress called Ehram (vulgarly Heram), consisting generally of two simple pieces of cotton or linen or woollen cloth, without seam or ornament, one of which is wrapped round the loins, and the other thrown over the shoulders; the instep and heel of each foot and the head must be bare. After the recitation (a Khutbah on Mount Arafat), the sacrifice, and other ceremonies on the return journey to Mecca, in the valley of Mena, every one resumes his usual dress, or puts on a new one, if provided with such.

I.H.S. This sacred monogram, arranged in cypher, is the Chinese Buddhist's sacred symbol of Buddha.

IJARA. HIND. A contract. Ijaradar, a contractor.—*W.*

IJMA. ARAB. Lit. collecting or assembling, in Mahomedan theology, means the unanimous consent of the Mujtahadin or learned doctors. See Jama.

IJTIHAD. ARAB. Carrying on war against non-Mahomedans and infidels. See Jihad.

IJU, also written Eju, the horsehair-like substance which grows on the gomuto tree, the *Arenga saccharifera*, *Labill.* This substance is also called gomuto; part of it is a stiff bristle, but the bulk more resembles horsehair, and it is largely made into cordage. See Arenga; Gomuto.

IKAN. MALAY. A fish; also a crab. The word is always prefixed or added to the specific name of the fish, as ikan-bawal, the pomfret; tulor-ikan, fish-roe; sirip-ikan, fish-fins; sisek-ikan, fish scales.

Ikan dori, a small dark-coloured fish, of about a pound weight. Great caution is necessary in handling it, because it is armed with poisonous spikes under the pectoral and dorsal fins, the wounds from which are extremely painful. It is not much esteemed.

Ikan mimi, the king-crab.

Ikan saladu and **Ikan surdudu,** Arius Arius.

Ikan sambalang, literally fish of nine, from the nine barbs on its head. It is found in the ponds of the Malay Peninsula, and is largely eaten.—*Earl; Cantor; M'Nair*, p. 83; *Simmonds.*

IKAUNA, a pargana in Bahraich district, Oudh. The Brahmans, 13,986, are the most numerous caste; the Ahirs and Kurmis coming next, with 9740 and 7615 respectively. The village of Tandwa is identified by General Cunningham with the Tu-wei of Fa Hian and Hiwen Thsang, where Kasyapa Buddha was born and lies buried; while a statue of the mother of Sakya Buddha is now worshipped in the village as Sita.—*Imp. Gaz.*

IKRAR. ARAB. A promise, an agreement. Ikrar-namah, a deed of settlement.

IKSHWA'CU, one of the ten sons of Manu Vaivasvata, considered to have been the first of the Solar dynasty, offspring of the sun. He reigned at Ayodhya, the capital of Kosala, in the second or Treta Yuga. As the offspring of the sun, his

posterity was called the dynasty of the Solar princes, in the same manner as Budha was reputed the head of the Lunar line. Modern commentators bring the time of his accession down to the year 1320 before Christ. A passage in the Agni Purana indicates that the line of Surya, of which Ikshwa'cu was the head, was the first colony which entered India from Central Asia. But the patriarch Budha was his contemporary, he being stated to have come from a distant region, and to have been married to Ila (Ella), the sister of Ikshwa'cu. Max Müller says this name is mentioned only once in the Rig Veda, and he and others suppose it is the name not of a king, but of a race occupying the northern or north-western part of India.

The lineal descent from Brahma Bharata was Bramha, Marichi, Vaviswat, Manu, Ikshwa'cu, Kukshi, Vikukshi, Vanu, Anaranya, Prithu, Trisanku, Dhundumar, Yuvaneswa, Mandhata, Sisandhi, Dhruvasandi, Bharata.

Nimi, one of Ikshwa'cu's hundred sons, founded the Mithila dynasty.—*Dowson.*

IL pronounced also Ilat or Iliat, a term applied to the nomade tribes of Persia. It is also a Semitic form of God. See Iliyat.

ILA, sister of Ikshwa'cu, of the Solar race, was married to Budha of the Lunar race, and these were the ancestors of the Lunar line of kings. In Hindu mythology, Budha, son of Atri, son of Brahma, was husband of Ila, the earth, daughter of Spatembas. Budha was Mercury, son of the moon.

ILĀ or **Ilita**, mentioned in the Vedas as a goddess, may possibly be the same as the Babylonian goddess Ili or Bilat Ili, queen of gods.

ILA, in the Rig Veda, is food personified as the goddess of speech. According to Sayana, she is the goddess presiding over the earth. The Satapatha Brahmana represents her as springing from a sacrifice which Manu performed to obtain offspring, and she had offspring to Manu. According to the Puranas, she was the daughter of Manu Vaivasvata, wife of Budha (Mercury), and mother of Pururavas; but, through the favour of the gods, her sex was changed to a man, but again became a woman, and she married Budha, to whom she bore Pururavas.—*Dowson.*

ILACHI. HIND. A generic term for the fruits of several plants producing cardamom, viz.:

Bari-ilachi or Ilachi-kalan, Amomum cardamomum, the large rough-shelled variety.
Choti or Khurd-ilachi, Elettaria cardamomum, the small cardamom.

ILAH, the name of an old Arabian deity, and is more properly and more usually applied to a pagan god, than to Allah, God supreme over all,—composed of Al, the, and Ilah, God. Hence the Mahomedan profession of faith says, La ilah il-Allah, etc., which in the ordinary translation of 'There is no god but God,' conveys no precise meaning, and involves an obvious truism, which Mahomed would never have enunciated. The true reading would be, 'There is no deity but God.' From some passages in the early Indian historians, it would appear that they supposed the famous Somnat to be the Arabian Ilah or Ilat. Notices of it occur in the Rauzat-us-Safa, Habib-us-Sair, and Ferishta, the passage quoted from Farid-ud-Din Attar; Sale's Koran, i. p. 23, ii. p. 390; Hyde, de Rel. Vet. Pers. p. 130; Pococke,

Spec. Hist. Arab. pp. 4, 92, 110; Bird's Gujerat, p. 39; D'Herbelot, Voce Lat.; Al-Makkari, Mahomedan Dynasties in Spain, i. p. 346; and Herod. iii. Alilat, the gods; Ilahat, a goddess; Ilahi, divine.—*Elliot*.

ILAHABAD or Allahabad, a city of the N.W. Provinces of British India. Before Akbar's time, this place was known as Preag or Prayag; by him it was denominated Allahabas, which subsequently became Allahabad. The name is more correctly Ilhabad or Ilahabad, but the usual practice of writing it is Allahabad. The article 'al' coalesces with the substantive in Allah, and represents the Almighty.—*Elliot*.

ILAH. ARAB. The title of an era, now obsolete, invented by the emperor Akbar, commencing with the first year of his reign, A.H. 963 or A.D. 1556. It was on his coins. The Ilahi gaz is the standard gaz, or yard, of forty-one fingers, instituted by Akbar. After much controversy respecting its length, it was authoritatively declared by the British Indian Government to be 33 inches long; and the declaration has been attended with considerable convenience to revenue officers, as a bigha measured by this yard constitutes exactly five-eighths of an acre.—*Elliot*.

ILAKA. ARAB. A dependency. Ilaka-dar, a person in possession.

ILAKA-BAND. HIND. A silk fringe, silk girdle, and tassel maker. Ilaki, a square scarf of Multan.

ILA KURA. TEL. Salsola Indica, *Willd*. This is occasionally used as a vegetable, and, being naturally salt, has given rise to the Teling saying, 'The carping husband (finding fault without cause) says to his wife, There is no salt in the Ila kura.'

ILAM, said by some authors to be the Tamil name of Ceylon, and to signify gold; but gold in Tamil is Ponnu.

ILAMBADI. TAM. Corruption of Lambady, the Banjara race, so called in the south of India.

ILA-PANANKI JANGU MAVU. TEL. A farina is obtained from this root by treating it the same as in manufacturing manioc. It is very nourishing.

ILAVRATA. In an ancient Hindu geography, one of the divisions of the known world; its mountains are called Tien-chan, Kiloman, Tangrah or Tangle.—*As. Res.* viii. p. 311.

ILCHI, a town in High Asia, with 40,000 inhabitants.

ILEX, the holly genus of plants. Dr. Wight mentions *I. Gardneriana* and *I. Wightiana*. Mr. Thwaites names, as growing in Ceylon, *I. denticulata*, a large, and *I. Walkeri*, a small tree. Mr. Hodgson, in his Nagasaki, mentions eight species in Japan, viz. *crenata*, *Thbg.*, *microphylla*, *Bl.*, *integra*, *Thbg.*, *latifolia*, *Thbg.*, *rotunda*, *Thbg.*, *serrata*, *Thbg.*, *aquifolium*, *L.*, var. *heterophylla*.

Ilex denticulata, *Wall.*, is a very large timber tree, not uncommon on the higher ranges of the Neilgherries and Annamallays at 6000 to 8000 feet, and at similar elevations in Ceylon; its timber is much valued, and is said not to warp or crack; it has serrated leaves.—*Bedd. Fl. Sylv.*

Ilex diphyrena, *Wall.* Himalayan holly.

Dodru, Dinsu, . . . BEAS.	Kanjru, Karelui, . . . RAVI.
Kruchu, "	Drunda, "
Kimelu, CHAMBA.	Kalucho, "SUTLEJ."
Shangala, CHENAB.	

This moderate-sized tree grows at Mussoori and everywhere in the Himalayas to 5000 or 9500 feet. The wood is heavy, hard, and fine grained, much like common holly, and used for various purposes of carpentry. It bears a very close resemblance to the holly, especially in November and December, when it is covered with clusters of scarlet berries.—*Stewart*.

Ilex Malabarica, *Bedd.*, a large species growing in the Wynad.—*Bedd. Fl. Sylv.*

Ilex serrata is a lofty species found in Mussoori, and *I. excelsa* in Nepal.—*Royle, Ill.* p. 167; *O.S.*

Ilex Walkeri, *Wight, Gardn.*, is a small tree in the Central Province of Ceylon, growing at an elevation of 5000 to 8000 feet.

Ilex Wightiana, *Wall.*, is a large umbrageous tree, with small white flowers and red berries, growing in the Neilgherries and in the southern and central parts of the island of Ceylon up to an elevation of 4000 feet.—*Thw. Zeyl.* p. 183.

ILI, a valley and town in Central Asia, from which Lassen supposes the Szu Tartars were expelled by the Yue-tchi or White Huns, B.C. 150. He supposes the Szu Tartars to be the Sacæ, and the Yuc-tchi to be the Tochari. After occupying Tabia or Sogdiana for a time, they are stated by the Chinese to have been driven thence, also, by the Yengar, some years afterwards, and to have established themselves in Kipen, in which name Lassen recognises the Koppen valley in the Kohistan. The great Kirghiz horde is adjacent to Ili and Tarbagatai. It is under the dominion of China, and exchanges large quantities of cattle on the frontier for silk goods. The Tsiankiun has authority over the Eluth and Chahar of his own central province of Ili, who have also Chinese ministers; also over the Eluth, Chahar, and Hassack, under the Tsantsan minister resident at Tarbagatai, and over the Mahomedans of the eight cities in Ili, south of the Tien-shan, who are under resident ministers of different degrees.

ILIJAT are tribes in Persia and Khiva, some of whom are nomade, dwelling in tents, and others reside in towns. The word Iliyat is derived from *Il*, a Turki word signifying tribe, equivalent to the Arabic *Kabilat*, to which 'aut,' an Arabic termination of the plural, was added,—a combination not uncommon. The Iliyat tribes in Persia are mostly of Arab, Kurd, and Turkoman descent; along with tribes from the Bakhtiara mountains, who are of a race totally distinct from the northern hordes, and probably something more indigenous to the soil than any of the other wanderers, but all lead the same manner of life, and bear the common name of Iliyat, their pastoral habits little distinguishing them from the Bedouin Arab or the nomade Tartar. The subjects of the Persian empire therefore appear to consist of the stationary inhabitants of towns and cities, and the wandering dwellers in tents and temporary villages. The Iliyat comprise a very large portion of the population of the country, though their actual numbers are not well known. They are Mahomedans of the Sunni sect. Many of the best families in Persia are of Iliyat origin. The present royal family is of the Kajar tribe, a Turkish *Il*, which came into Persia with Timur. The principal Iliyat tribes are said by Morier and MacGregor to be—

Afshar.	Bayat.	Kurd Buchel.
Ainak.	Felli.	Lak.
Arab.	Hazara.	Mama Senni.
Bajilan.	Kajar.	Shah Sevan.
Bakhtiari.	Khuda Banli.	Shekagi.
Baluch.	Kurd.	

Frazer mentions that in his time 195,000 Iliyat families were tributary to Khiva, viz. :—

Yamut,	15,000	Kazak,	40,000
Goklan,	20,000	Ikdar,	15,000
Chudar,	2,000	Sarokh,	15,000
Kalpak,	30,000	Uzbek,	40,000

The Chudar are said to have been brought from the farther borders of the Oxus by Muhammad Rahim Khan. In the 10th century, they are said to have comprised 500,000 families within the province of Fars alone. Although much inferior in numbers, many of the present Iliyat tribes are very considerable; and since the destruction of Rai, and the decay of Isfahan, Shiraz, and all the other great cities throughout the empire, they constitute a principal source of population, and the best nursery of its soldiers. Some of their chiefs are men so powerful that the king attaches them to his court by honourable and lucrative employments, or detains them about his person as hostages for the loyalty and good conduct of their respective clans. We find them, as they were 800 years ago, unmixed with the Persians who inhabit cities; retaining their pastoral and erratic habits, and using among themselves a dialect different from the language of the country, which, however, most of them can speak and understand. They are an independent and hardy race, inclined to hospitality. Two or three families in little groups, preparing or enjoying their simple meal by the roadside, or proceeding on their journey, the wife carrying one child, two or three others packed in baskets on an ass, which the husband drives before him, are usual pictures to be seen.

Iliyat tribes have each their own history. They change their places of encampment with the season and climate, going in the summer to the Ailak, or quarters where pasturage and water are to be found in abundance; and when the cold of winter sets in, adjourning to the Kishlak or warmer region, in which their flocks and herds, as well as themselves, are better sheltered. The tribes adhere to their respective districts, but the distances that some of the tribes have to perform in their annual migrations are really wonderful. From the southern shores of Fars, the Kashgoi arrive in spring on the grazing grounds of Isfahan, where they are met by the wandering Bakhtiari from their warm pastures of Arabistan, near the head of the Persian Gulf. At the approach of winter both these tribes return to their respective Kishlak or Garm-sair. In each province of Persia there are two chiefs, elders, acknowledged by all the tribes who roam in that province. In their conduct and morals the Iliyat women are vastly superior to those of the towns and settlements. They are chaste and correct in their lives, and faithful to their husbands. They are Sunni Mahomedans, but are by no means particular in their religious observances, and are not ruled or influenced by the maula as townsmen are. They are all, in a greater or less degree, professional robbers,—some tribes living solely by rapine and plunder, and others resorting only occasionally to such means. They have large flocks and herds,

which they often augment by taking possession of their neighbours'. The civilised population hold them in great dread on this account. The Il-khani of Fars is the chief of the Kashgoi tribe.

The nomades breed camels, cattle, and horses, mules and asses. Their tents are made of goats' hair. Often on approaching an Iliyat encampment, the stranger is met by the women of the tribe, who burn aromatic herbs in honour of the guest, and as a token that he is welcome to their hearth. Mr. Bickmer observed a similar practice among the Kuldi in Kurdistan. This custom must be very ancient, for we find Fardusi alluding to it in his descriptions of the early heroic ages of Iran.

The usual drink of the Luristan Iliyat consists of buttermilk weakened with water; a little salt is added to it, and it is then called Ab-i-dhung. It is generally sour. There is nothing so efficacious for the purpose of slaking thirst on a hot summer's day as this ab-i-dhung.—*De Bode's Travels; Ouseley's Travels; Rich's Kurdistan; Frazer's Travels; Morier; MacGregor.*

ILLIAM. MALEAL. A house, a dwelling, a household.

ILLANUN, also Lanun, a maritime race of the Archipelago, formerly addicted to piracy. In the year 1837, the schooner *Maria Frederica*, Captain Gregory, was cut off in Ampanam roads; and in 1840, the English whaler *Mary*, Captain Blossie, while at anchor at the North Islands, near the N.W. point of Lombok, was surprised and taken by a fleet of Lanun prahus (See *Moniteur des Indes* for 1847-48, pp. 17-21); but the vessel and crew were soon afterwards ransomed for a large sum in Spanish dollars by Mr. King, who subsequently, finding that the pirates still remained there, fitted out an English merchant brig, that was then loading rice for England, with guns and men supplied by the king of Lombok, and succeeded in driving them away for a time. Traders visiting any of the ports east of Java should take every precaution to prevent surprise. Their course along the north-west coast of Borneo to the coasts of Sumatra and the Malay Peninsula is now obstructed by the settlement of Labuan, which they cannot pass without some intelligence being received of their motions, and this being conveyed speedily to Singapore, would inevitably lead to their being sought out and destroyed.

ILLECEBRACEÆ, the knot-grass tribe of plants, comprises thirty-nine genera. Of these, three species are found in Arabia, one in Persia, one in China and in continental India. Seventeen forms have been discovered in the E. Indies of *Herniaria*, *Hapalosia*, *Illecebrum*, *Polycarpea*, *Drymaria*, *Mollugo*.

ILLICIUM, a genus of plants belonging to the order Winteraceæ of Lindley. The order contains four genera and twelve species, shrubs or small trees; one of them, the *Illicium anisatum*, grows in Japan and China; one on the Khassya mountains, and one in New Zealand. The general properties of the order are stimulant and aromatic.—*Voigt*, p. 13.

ILLICIUM ANISATUM. *L.* Star anise tree.

Badian-i-khtai, . . .	ARAB.	Chinese anise, . . .	ENG.
Hwai-liang, . . .	CHIN.	Skimmi, . . .	JAPAN.
Ta-hwui-liang, . . .	"	San-ki, . . .	MANILA.
Tah-koh-hwui-liang, . . .	"	Anasi pu, . . .	TAM.
Anas phal, DUKH., HIND.		Marati megga, . . .	TEL.
Aniseed tree, . . .	ENG.		

The star anise tree is a native of the countries extending from lat. $28\frac{1}{2}^{\circ}$ to 35° N., or from Canton to Japan. The designation star is applied to the fruit from the manner in which they grow, the pods being in small clusters, joined together at one end, and diverging in five rays. They are prized for the volatile oil obtained from them, and for their aromatic taste. The barks have a more aromatic flavour than the seeds, but they are not so sweet. In China, their most common use is to season sweet dishes. In Japan they are placed on the tombs of friends, and presented as offerings in the temples. They are chiefly exported direct to India, England, and the north of Europe, at the average value of $8\frac{1}{2}$ dollars per pikul. In India they are used in seasoning curries and flavouring native dishes; and large quantities are used in Europe in the preparation of liqueurs. The capsules constitute in India a rather important article of commerce, and are sold in all the bazars. Both capsules and seeds evolve a powerful odour of anise; the taste is similar, very mild, sweet, and somewhat acidulous. The capsules and seeds abound in an essential oil, easily procured by distillation with water; this oil is rather brown, lighter than water, more difficultly congealed than the true aniseed oil, but in other respects exactly of the same properties. The powdered capsules are used by the Mahomedan practitioners as stimulant carminatives. For the colics of children, the essential oil is given with advantage. The tree might be introduced into India.—*O'Shaugh.*; *Thunberg's Tr.* iii. p. 227; *Morrison's Comp. Summ.*; *Simmonds*; *Faulkner*; *O'Sh. Beng. Phar.* p. 412; *Royle, H. B.* p. 58.

ILOCO, one of the languages spoken in the island of Luzon. In the Philippines are many separate nations or tribes, speaking distinct languages, unintelligible to each other. The principal tongues of Luzon are the Tagala, the Pampanga, the Pangasinan, and the Iloco, spoken at present by a population of 2,250,000 people; while the Bisaya has a wide currency among the southern islands of the group, Leyte, Zebu, Negros, and Panay, containing 1,200,000 people. Mr. Crawford says that it does not appear, from a comparison of the phonetic character and grammatical structure of the Tagala with those of Malay and Javanese, that there is any ground for fancying them to be one and the same language, or languages sprung from a common parent, and only diversified by the effects of time and distance, and that an examination of the Bisaya dictionary gives different results. See India.

ILOL, a native state within the political agency of Mahikanta, in the province of Gujerat, Bombay. Pop. (1872), 5511.

IMAD SHAHI, a dynasty of Berar, founded by Fattah Ullah, a descendant of a Hindu convert.

Fattah Ullah,	A.D. 1484	A.H. 800
Ala-ud-Din,	" 1504	" 910
Deria, . . . (about)	" 1529	" 936
Burhan,	" 1560	" 968
Tufal,	" ?	" ?

Merged into that of Ahmadnaggur, A.D. 1572, A.H. 980.—*Elph.* p. 676.

IMAM. ARAB. A leader; the president of a mosque; the person who leads the daily prayer and is in receipt of the revenues of the mosque; also the title of the four great doctors of the four

orthodox Sunni sects; also the title of the twelve great leaders of the Shiah sects; but it is also given to any great religious leader, head, or chief in religious matters, whether the head of all Mahomedans as the khalif, or the priest of a mosque, or the leader in the prayers of the congregation. Imam answers to the Latin Antistes. In the Koran (chap. ii. vers. 118-20), 'God said unto him, Abraham, I constitute thee Imam unto men,' that is, a model of religion.

After the death of Mahomed, his successors, the khalifs, became his delegates or lieutenants, and were also termed Imam or leader. When Mahomedans meet together for prayer, an Imam is chosen who leads the prayer, and the congregation regulate their attitudes by his, prostrating themselves when he does so, and rising when he rises. In like manner the khalif is set up on high as the Imam or leader of the faithful in all the business of life. He must be a scrupulous observer of the law himself, and diligent in enforcing it upon others. The election of an Imam is imperative (p. 229). The fourth Sura says, 'Obey God and his prophet and those of your people who exercise government over you.' The qualities of an Imam are knowledge, integrity, mental and physical soundness.

Imam is a sacred title with the Shiahs, and is given only to Ali and the immediate successors of the Prophet, who were twelve in number, their Bara-Imam. The last of these, the Imam Mahdi, is supposed by them to be concealed (not dead), and the title which belongs to him cannot, they conceive, be given to another. Among the Sunni Mahomedans, however, it is a dogma, that there must be always a visible Imam or father of the church. It was long maintained that the Imam must be descended from the Arabian tribe of Koresh; but the emperors of Constantinople (who are of a Turk family) have assumed the sacred title, which they claim on the ground of the formal renunciation of it by Muhammad the twelfth, the last khalif of the race of Abbas, in favour of Selim the first. The acknowledgment of this title renders the emperor of Turkey the spiritual head of all orthodox Mahomedans.

The sect of Mahomedans who believe that the Imam Mahdi has come and gone, are the Mahdavi, or, as others call them, Ghair Mahdavi, i.e. people without Mahdi. About the year 657 A.D., or some twenty-five years after the death of Mahomed, his son-in-law Ali met Muavia, and fought the battle of Siffin. Displeased at the conduct of Ali on that occasion, about twelve thousand men deserted him. Some years after, they were nearly all destroyed by Ali; but a few survivors fled to various parts. Two men settled in Oman, and there preached their distinctive doctrine of the Imam, that is, they taught that the office of 'Head of the Faithful' was elective, and not hereditary. They thus differed from the ordinary Shiahs, who hold the doctrine of divine right in its entirety, and never can acknowledge any khalif or chief who is not descended from Ali. Some fifty years after this, one Abdullah-ibn-Abad vigorously preached the doctrine of the right of the people to elect the khalif, or, as they would call their head, the Imam. It is from him that the sect of the Ibadiyah, an offshoot of the Shiahs proper, takes its rise. They elected their own Imam, and thus arose the jurisdiction of the Imam of Oman. From

this potentate came the Sultan of Zanzibar. This shows how entirely free they are from any allegiance to the Sunni khalif. No Ibadiyah ever acknowledged the khalif of Baghdad as his spiritual chief, much less is he likely to recognise one in such a doubtful successor to the office as the Ottoman Sultan. It is not known that the ruler at Muscat has ever laid claim to the title of Imam, though Europeans invariably confer it on him. Imam is, however, said to be now adopted as a royal or dignitary title by several Arab and African sovereigns. The successors of Mahomed continued to exercise their religious functions in proof that they enjoyed spiritual as well as temporal power, and took the title of khalif; but various Arab princes, who dared not aspire to the title of khalif, took that of Imam, to which they frequently added that of Amir-ul-Mominin, or prince of the faithful, and, like the khalifs, observed the precaution of changing their name when they ascended the throne. The custom seemed to typify that their whole nature underwent a change, on being invested with an office to which a certain amount of sanctity was attached.

Of the twelve Imams of the Shiah sect, one was Imam-Ali, cousin and son-in-law of Mahomed, who married Fatima, Mahomed's daughter; the two sons of Ali, the Imam Husain and Imam Hasan, neither of whom were successful leaders, though since their deaths they have by some sects been deified and believed to be incarnate (Ali, Ilahi).

In every Sunni mosque, at the appointed prayers, there is a leader of the devotions, who is called the Pesh-Imam, because he remains in front (Pesh) of the worshippers, leading them in the successive parts of their worship.

The four learned doctors of the faith were Malik ibn Anas, Imam Abu Hanifa, Imam us Shafi, and Imam Ahmad bin Hanbal.

Malik ibn Anas, a native of Medina, born A.D. 713-14, A.H. 95, died A.D. 795, A.H. 179, in his 84th year. He wrote the treatise called *Muwatta*, the Beaten Path, classifying the oral traditions. It formed a system of jurisprudence which prevailed throughout Spain and Northern Africa, its extension in Spain having been aided by Yahia ibn Yahia, a Berber, who had visited Medina to sit under the teaching of Malik ibn Anas. He returned to Spain, where he had much influence.

Imam Abu Hanifa, a Nomad of Persian origin, was born at Basra, in the Hijira year 80 (A.D. 699-700). He was a learned and devout man, humble in spirit. He passed most of his life in Kufa, and was famous as a lawyer. He refused to be kadi of Kufa, on which Ibn Omar ibn Hobaira, governor of the two Iraks, ordered him to be daily flogged until he consented. Ten strokes of a whip were consequently inflicted daily for twelve days, and, being still a recusant, he was set at liberty. He died in prison A.H. 150, A.D. 767.

Imam us Shafi, of the tribe of Koresh, was born A.H. 150, A.D. 767-68, and was brought up in Mecca, but at the age of 45 went to Baghdad, and afterwards to Old Cairo, where he remained till his death in A.H. 204, A.D. 820. He was an eclectic. His doctrines were taught in the schools of Cairo, Irak, Khorasan, and in the regions beyond the Oxus. Between the Hanifa and Shafi sects there were controversies and animosities, and when the Mongols of Chengiz Khan appeared before Rho, the Shafi sect offered to deliver up the

city on the condition that all the Hanifi were slain. This was acted on, but a few days afterwards the Mongol slew also all the Shafi, and the bodies of the members of the two sects were thrown together.

Imam Ahmad bin Hanbal was the fourth and last of the great orthodox Imams. He was born A.H. 164, A.D. 780, at Merou or Baghdad. His teachings differed from those of Shafi in that he did not allow the principle of deductions. His system never extended beyond Baghdad, and is now obsolete.—*Osborn's Islam*; *Pottinger's Travels*, *Burton's Scinde*; *Malcolm's Persia*, ii. p. 345.

IMAM ALI, a town in the vicinity of the Shatt ul Arab, in Ur of the Chaldees.

IMAM BARA. HIND. A building in which are conducted the ceremonies of the Maharram, in commemoration of the deaths of Ali and his sons Hasan and Husain. The Tazias or shrines are sometimes retained in it.

Imam-bari, a building over an imam or Mahomedan saint, or other holy Mahomedan. The imam-bari at Lucknow is a magnificent palace. Its most remarkable part is an immense hall, containing the tomb of Asaf-ud-Dowla, the great-grandfather of the last king of Oudh.

IMAMI. HIND. A kind of Kābul silk.

IMAM MASHUDI, the religious guide of Akbar. His tomb is to the west of the Masjid-i-Kutub-ul-Islam.—*Tr. Hind.* ii. p. 201.

IMAM RAZA is buried at Mashid. In his name whole bazars and streets have been bestowed in Mashid, and outside that town, as also in other parts of Khorasan, fields, vineyards, and caravansaries. He is styled Hazrat, also Sultan-ul-Ghriba, king of the poor, and is always mentioned as if still living; a poor person applying at his shrine receives three days' provisions.—*Vambery*, p. 286.

IMAM-ul-MUWAKKAF. See Hasan ibn Sabbah.

IMAMZADAH means the descendants of an imam; but, it is said, generally applied in Persia to the mausoleums built over the bodies of such descendants, which are to be found scattered in great abundance all over the country.—*Fraser's Khorasan*, p. 303.

IMAN. ARAB. Faith. In Mahomedanism, the belief of the heart and the confession of the mouth.

IMAUS, a name by which part of the Himalaya was known to the Greeks and Romans. Pliny was fully aware of the signification of the name, for he says (*Hist. Nat.* vi. p. 117), 'Imaus in colarum lingua, nivorum significans.' A great part of the mountains N.W. from India was also called the Paropamisus or Hindu Kush; and Imaus and Hindu Kush seem to have been identical. The true Imaus, however, is the ridge which separates Kashmir from Little Tibet. It appears to incline in its northern course towards the continuation of the Hindu Koh, and even to join it. The term Hindu Koh or Hindu Kush is not applied to this ridge in its whole extent, but seems confined to that part of it which forms the N.W. boundary of Kabul; and this is the Indian Caucasus of Alexander. There is, however, much confusion from the Tibetan, Chinese, and Persian names of that great mountain mass.—*As. Res.* iii. p. 389. See Himalaya.

IMMOLATION. Self-immolation is not uncommon in India. It is generally performed by persons lingering under incurable disorders. It is

done by leaping into fire, by burying alive, by plunging into a river, or by wading into the river with earthen pots at the side, and filling them until they sink, dragging the victim down with them. —*Elphinstone*, p. 191. See Sati.

IMPATIENS, Balsams.

Fung-sien, . . . CHIN. | Tatura, . . . KANGRA.
Kih-sing-taze, . . . " | Pallu, Tilphar, . . . RAVI.
Bantil, . . . JHELUM. | Hulu, Juk, . . . SUTLEJ.

A genus of plants belonging to the East Indies. Single species extend into Europe, Siberia, and North America. Not less than 100 species are known, and almost entirely from the mountains of the Peninsula of India or the Himalaya, from Sylhet as far north as the Sutlej, and in lat. 30° N., at as great elevations as 7000 feet, but chiefly at elevations of 4000 and 4500 feet, where there is moisture combined with a moderate but equal temperature. They are abundant on the mountains of the Western Ghats, but absent from the plains of India, though some are found on the Malabar coast, little elevated above the sea, but only during the monsoon. They are largely cultivated in Indian gardens as handsome flowering plants; colours—rose-pink, white, blue, and variegated. In the middle of the rains, the whole line of the Western Ghats is covered with them. The ripe capsules, on being touched, fly open and scatter their seeds, whence they get the name of Noli me tangere.

albida.	Goughii.	ornata.	sylvestris.
bracteata.	inconspicua.	oppositifolia.	trilobata.
campanulata.	insignis.	rhoeoifolia.	tomentosa.
cuspidata.	Jerdonia.	rivalis.	tripetala.
clayperma.	Kleinii.	rosmarinifolia.	triphylla.
fasciculata.	latifolia.	rufescens.	umbellata.
filiformis.	Leschenaultii.	scabrida.	uncinata.
fomentosia.	modesta.	scapiflora.	verticillata.
fruticosa.	Munronii.	setacea.	viscida.
Gardneriana.	Mysorensis.		

IMPERATA ARUNDINACEA, *Cyrillo*, of S. and E. Asia, the alang grass of India, almost a sugar-cane in miniature; valuable for binding sand, especially in wet localities. —*Mueller*.

IMPERATA CYLINDRICA. Beauv.

I. arundinacea, *Cyril*. | *Saccharum cylindricum*,
Lagurus arundinaceus, *L.* | *Lam.*

The Ooloo plant of all India, Ceylon, Moluccas, and Australia. Much used as thatch. —*Voigt*.

IMPERATA KENIGII. Beauv.

Sir, Sil, Bharwi, . . . PANJ. | Alang-alang, . . . MALAY.

A silky-headed small grass, abundant at low spots in many parts of the Panjab plains.

IMPHI, the Chinese sugar-cane, *Sorghum saccharatum*, *Pers.*, is said to have long been grown in India, but was re-introduced in 1860 by Surgeon-Major Balfour, of the Madras medical department. With careful cultivation in a rich, well-watered cotton soil, it attains the height of eight feet, and it yields in three months a crop of plants very similar to sorghum, except in the appearance of the heads. The natives consider it a variety of sorghum, and are favourably impressed with the plant, as it yields a large quantity of sweet juice which produces good jagari, and the crushed stalk is excellent food for cattle.

INAM, ARAB. A gift, a grant, of which there are many kinds. Inamdar, a holder of a rent-free grant of land. A revenue term introduced by the Mahomedans. Hindus have no word to denote rent-free lands, or freehold property, except Suwasthan, one's own place; but with them that is never found in less quantities than a whole

village. Rent-free lands under the Hindus were merely designated by terms signifying the purposes to which devoted, as Dewasthan, the idols' place; Pasodi, a shawl, the Patel's grant; Choli, 'a bodice' for the Patel's wife; Hadola, a row or collection of bones; Hadki, a little bone; Domni, a dish,—the last three being grants to the Mhar tribe. Deo Shet, a grant to a person who has been successful in a trial by ordeal, such as that of determining a village boundary. In Mahomedan countries, it is customary to call inam grants to religious orders grants of land, although they include only the rents thereof; for there is no seising of the land itself, which is the proprietary right of the cultivator only. In the tamba-patra, copperplate patent (by which such grants are designated in Rajputana) of Yasovarman, the Pramara prince of Ujjain, about the 12th century, commanded the crown tenants of the two villages assigned to the temple to pay all dues as they arise, money-rent, first share of produce. In India, where the cultivating proprietor has always paid a feu-duty to the state, the grant of an inam is, like the grant of a jaghir, merely the transfer of the state dues. According to practice, a jaghir is a reward for past or a retaining fee for future services, or a means of support, and is resumable at pleasure. The inam for religious purposes has been a more permanent alienation; but even the Madras Government about the middle of the nineteenth century re-examined all the inam grants, and up to a late date decisions had been given on 396,815 cases.

Under the Mahomedan sway, inam became a revenue term, which the British adopted, but was inquired into when peace permitted the examination of the inams. The religious merit attached among Hindus to the grant of land to the Brahmanical class, the facility afforded by the period of anarchy which followed the overthrow of the native dynasties for irregular alienations by inferior authorities, the acceptance by the Mahomedan rulers of the existing condition of things, the further opportunity for irregular grants which was given under the political confusion occasioned by the struggle between the British and French for Indian supremacy during the latter half of the 18th century, and the system of rewarding meritorious service by alienations of Government revenue, either in perpetuity or for a stated number of lives, which was in force during the earlier years of British rule in the Madras Presidency, from the enormous sacrifice of state revenue involved, attracted the attention of the administration at a very early period, and caused a recognition of the importance of a general inquiry into titles to rent-free lands.

Inam tenures were found divisible into nine general classes. The first three classes are inams for religious and public service. They consist of grants for the support of pagodas, muttums, village headmen, mosques, and durgas, kazis, Christian churches, chuttrums, water pandals, topes, tanks, wells, anicuts, schools, and miscellaneous works of utility.

In the Madras Presidency the basis of Sir Charles Trevelyan's inquiry was that possession for fifty years was to give a good title, no matter what the origin of the possession might have been. This being established, religious service inams were all to be confirmed on existing tenures, and

to be resumed only when the object for which they were held had ceased to exist. Other service inams were to be continued on the same terms when such services were still required; but when they could not be made available for any useful public purpose, the value of the public claim upon the land was to be added to any existing quit-rent payable thereon, the owner being thus enfranchised from service. All other inams held for personal benefit were either to be retained on existing tenure, subject to liability to lapse and without power of alienation, or were, at the option of the holder, to be converted into an absolute property by the imposition of a quit-rent representing the annual value of the reversionary right of Government in the property. This reversionary right was estimated in terms particularly favourable to the inamdars, in order to induce them to take advantage of the privilege offered.—*W.*

INCENSE-WOOD, eagle-wood. Incense was burnt in ancient heathen temples to neutralize the offensive odour arising from animal sacrifice.

INDERABIA, of some English navigators, is also written in different charts, *Andervia*, *Anderipe*, *Indervia*. Dr. Vincent (*Nearch.* p. 375) thinks it the *Caicandrus* of Arrian, but a corresponding name is not found in oriental manuscripts.—*Ouseley's Travels*, i. p. 174.

INDERJAO. HIND. *Wrightia antidysenterica*. Its seeds are very largely used medicinally, being boiled in milk, and given in hemorrhoids and dysentery, and in decoction in fever and gout; also used as an anthelmintic. Dose, gr. v to ʒj. Price 5 annas per lb. The bark of the root is astringent and febrifuge, and is used as a specific in dysentery and bowel complaints. Dose, ʒj to ʒiij in decoction.

Inderjaio-i-Sherin is *Wrightia antidysenterica*. *Inderjaio-i-Talq* is *Holarrhena antidysenterica*, also *H. pubescens*.

INDIA is supposed to have obtained its name from the Indus, the Sin, Sinda, or Hinda, the Abu-Sin of the Arabs, the first great river met in the routes from Western and Central Asia. It is true that so far back as the reign of Darius Hystaspes, B.C. 521, writers placed Indians on both sides of the Indus, and made India extend westward to Kandahar (Gandhara), embracing perhaps the fourteen Iranian provinces or nations enumerated on the Naksh-i-Rustum as lying between Sogdiana and the Panjab, and subject to Darius. But eastward of the Indus, the country was always India. But this term seems to have been chiefly used in the south of Asia, for it first occurs in the book of Esther (i. 1, viii. 9) as the limit of the territories of the king Ahasuerus in the east, as Ethiopia was on the west, and the names are similarly connected by Herodotus (vii. 9). The term *Hoddu*, used by the Hebrews, is an abbreviation of *Honadu*, which is identical with the names of the river Indus, for to the present day all along the course of that river the letters s and h are interchanged. In the *Yendidad*, the Panjab is described as the *Hapta-Hindu*, and the other native form, *Sindus*, is noticed by Pliny (vi. 23). The India of the book of Esther is not, however, the Peninsula of Hindustan, but the country surrounding the Indus,—the Panjab, and perhaps Sind,—the India which Herodotus describes (iii. 98) as forming part of the Persian empire under Darius, and the India which at a

later period was conquered by Alexander the Great. The name occurs in the inscriptions of Persepolis and Naksh-i-Rustum, but not in those of Behistun. Masudi mentions that at the time of the Muhammadan conquest, the country about Basrah was called *Arz-ul-Hind*, the Land of India.

There were other three names by which India was known to the western Asiatics. One of them originated from most of the traffic with India having at one time been by way of the Persian Gulf and the Red Sea. The Tyrians established depôts on the shores of the Persian Gulf, and the course of trade being through the land of the Cushdi, the races in India came to be included under the ethnological title of Cush (Genesis x. 6); and hence the Persian, Chaldean, and Arabic versions of the Bible frequently render that term by India (Isaiah xi. 11).

Another ancient but local term for India is stated to have been *Kolaria*, and numerous Kol tribes are scattered through the country to the present day. *Bharata* or *Bharata-varsha* is likewise mentioned as an ancient local appellation.

In recent times success in wars and diplomacy has placed under the dominion of the United Kingdom of Great Britain, or in alliance, nearly all the territories lying between the Indus and the Himalaya on the N.W., to Cape Comorin and Singapore on the S.E., and that part of Southern Asia has come to be spoken of as British India, and the British Empire in India also as Her Majesty's Eastern Empire. But British India, Netherland India, the Spanish Indies, Portuguese and French India, are but portions of the region in Eastern and Southern Asia known to Europe as the East Indies, and which include all the countries from Arabia and Persia eastwards through Baluchistan, Hindustan, the Malay Peninsula, Siam, the Indian Archipelago to New Guinea, China, and Japan. With the Portuguese, the northern part of Hindustan held by the Moghal sovereigns was styled *Mogor*, and Goa and the western coast of the Peninsula was to them *India*. With the Dutch, India means Java, Sumatra, and other Netherland possessions in the Archipelago. French India is in the Western Peninsula, and in Annam and Tonquin in Ultra-India; and the Spanish Indies are in the Philippine Islands in the far east.

The ancients termed the Ultra-Indian region India beyond the Ganges. Leyden included it and the Indian Archipelago under the name of the Hindu-Chinese countries. Malte Brun calls it *Chin-India*. Ritter, the greatest of geographers, prefers the German name *Hinter-Indies*. But instead of Further India, Trans-Gangetic India, the Eastern Peninsula of India, etc., the single words *Ultra-India* and *Trans-India* have been proposed by Mr. Logan, as they admit of the ethnic and adjective forms of *Ultra-Indian* or *Trans-Indian*; and for the insular region of the Eastern or Indian Archipelago, Mr. Logan proposed the term *Indo-nesia*. Mr. Logan's names are well chosen, because several of the islands have been occupied by Indian races. Java was long under a race from Hindustan, and Bali still professes Hinduism. The whole of the East Indies, therefore, consisting of the continental portions bisected by the Bay of Bengal, and the eastern islands, may be comprised under the three names of India Proper, *Ultra-India* or *Trans-India*, and *Indo-nesia*.

Populations.—The regions thus defined are occupied by races of Negroid, Mongoloid, Aryan, Turanian, and Semitic descent, and this article is restricted to the ethnic relations of the populations.

It is generally accepted that a great part of the inhabitants of Hindustan and the Peninsula are of Scythic, Mongoloid, or Turanian race, and were the earlier occupants of the country. This conclusion has been come to from their linguistic and physical affinities. Some of them seem to have been pastoral tribes from the north and north-west, who were subsequently pushed aside or pressed farther on by races in possession of a higher civilisation and a knowledge of agriculture. The successive arrivals have been supposed by Dr. Caldwell to have been—first and earliest, the Kol, Santal, Bhil, etc., who, he supposes, may have entered British India from the north-east. After them, but from the north-west, came the Dravidian races, who now occupy the south of the Peninsula, into which they voluntarily migrated or were driven by the pressure of subsequent hordes. Then there came Scythian or non-Aryan immigrants, also from the north-west, whose language afterwards united with the Sanskrit to form the Prakrit dialect of Northern India; and lastly came the Aryans.

From time immemorial the region between the Euphrates and the Indus has been held by successive Turanian, Iranian, and Semitic conquerors. In historic times Scythic tribes have invaded India,—Getæ, Takshak, Sakæ, Su, Yu-chi, Naga, Ghakar, Jat, Asi, Kathi, Rajpali, Hun, and Kamari. They seem to have brought with them a worship, out of which ultimately was formed the Buddhist religion as promulgated by Sakya Muni. These Indo-Scythic tribes also brought with them their northern custom of using tribal designations, taken from the names of animals,—Varaha, the hog; Numri or Lumri, the fox; Takshak, the snake; Langaha, the wolf; Cutch-waha, the tortoise; Aswa or Asi, the horse; Sisodia, from Sisoo, the hare, etc.,—and several of them still hold large possessions in the western parts of Central India, Sind, and Baluchistan. Some of them even carried their names into Europe. Asi was the term by which the Getæ, Ycut, or Jat were known when they invaded Scandinavia and founded Ycutland or Jatland; and the Asi and other nomades who took Bactria from the Greeks, Mr. Prinsep considers to have been Scythians of Azes, who overpowered the Greek dynasties in Sogdiana and Northern Bactria, between 140 and 130 B.C. And Asia seems to have been so called in ancient times from this great Asi race, whose name is said by Remusat to have been applied by the Chinese almost promiscuously to the nations between the Jaxartes and Oxus, as far south as Samarcand. In one of his quotations it is applied to the people of Khokand, and in another to the people of Bokhara. Kanishka, B.C. 40, formed a powerful Scythic dynasty in the N.W. But Vikramaditya, king of Ujjain, B.C. 57, stemmed one Scythic invasion, and in A.D. 78 Salivahana checked another inroad; yet during the next seven centuries the Sak, the Gupta, and Valabhi established dynasties in Northern and Western India.

The Dravidian race preceded the Ultra-Indian, Tibetan, and Aryan, and their language prevailed everywhere to the southward of the Himalayas.

Their route seems to have been from the north-west, where, Chevalier Bunsen says, the two great nations once centred, the one in the Altai and the pasture land towards the Himalaya, the other having its centre in the Ural mountains, and now appear in Asia as the subdued or primary element, as the subdued substratum of Iranian civilisation; and the aboriginal languages of India which attained their full development in the Dekhan dialects belong to that stock. Also Dr. W. W. Hunter's philological investigations permit the conclusion that the fragmentary peoples still to be seen in India, who have preserved their ethnical identity in sequestered wilds, or have merged as helots or low castes into the lowland Hindus, form the debris of a widely spread primitive race; and from the northern shores of the Indian Ocean and the China Sea, traces have been exhumed by him of ethnical evolutions, and the ebb and flow of human speech far more ancient, and on a grander scale, than the pre-historic migrations of the Indo-Germanic stock.

Successive Turanian and Irano-Semitic races have in turn influenced all the great outlying southern provinces in Africa, India, and Ultra-India; but from the formation of the language, the older intrusive people, the Scythico-Semitic and pastoral, found India less Scythic and more African than it became under their influence. And the land routes from the north-east, north, and north-west were not the only highways to the East Indies. Mr. Logan is of opinion that several of the races now dwelling in the south and east of Asia, in British India, Ultra-India, and Indonesia, reached their present localities by sea. Certainly, amongst all the foreign influences acting on the south of India proper, of which the presence can be clearly traced, two are of the widest extent. The first is entirely African and Indo-African in its character. It embraced the whole Indian Archipelago, Australia, and Papuanesia, and the races to which it must be referred appear to have prevailed along the shores and islands of the Indian Ocean from Africa to Polynesia, their limits being those of the monsoons.

There was prolonged commercial intercourse between the western and eastern parts of the Indian Ocean, from the Arabian Sea, Persian Gulf, Red Sea, and Africa, to the Mozambique channel on the west, to the Indo-Australian seas on the east. And when they were spreading over E. Africa, India, and the Indian Archipelago, there could have been no civilised Semitic, Iranian, Burmese, or Siamese races to hinder them. The strong Africanism observable in some of the lower South Indian castes is seemingly the remnant of an archaic formation of a more decided African character. India proper lies between two great Negro countries, that on the west being still mainly Negro, even in most of its improved races, and that on the east preserving the Negro basis so near India proper as the Andamans and Kidah. It is therefore highly probable that the African element in the population of the Western Peninsula has been transmitted from an archaic period, before the Semitic, Turanian, and Iranian races entered India, and when the Indian Ocean had Negro tribes along its northern as well as its eastern and western shores.

In the southern parts of the Western Peninsula, amongst the races speaking the Tamil language, are many who have African features in all their

variety. The mixed Labbi and Moplah races of the extreme south of the Peninsula may be of African and of Arabian descent. But the Sidi of Janjira are recent arrivals; the Negroes of the Dandilli Hills of N. Canara are of unknown origin; the African slaves of the Muhammadans of Baluchistan, Sind, the Dekhan, and Karnatic are classes regarding whose African and Arabian origin there are no differences of opinion; also the Kader of the Animallay Hills file their teeth to a point like some African tribes; the Mincopi of the Andaman Islands, the Semaug of the Eastern Peninsula, the Negrito and Papuan races of Indonesia and Papuanesia are recognised branches of the Negro race; while farther to the north, the Kisan or Nagesar, a broken tribe in the Jashpur highlands, have Negroid features; and the Bhuier of Palamau and Jashpur reminded Colonel Dalton of the representations he had seen of the Andamanese.

The vernacular of a people can only be taken as a test of descent along with their physical characteristics. The languages of conquered races, and of such conquering races as become associated with a higher civilisation, are liable to disappear. There cannot be any doubt that physically the Tamil Pariah, the Mhair of the Mahratta country, the Dher of the Dekhan, the Holiar of the Canarase, the Paravan of the Malcalam territory, and the Malla of Telingana, are of the same Dravidian stock, though they now speak five different tongues. Some broken tribes of Bengal speak a dialect of Hindi; but their physical characteristics, some of their customs, the remnants they have preserved of their primitive paganism, and in some cases their traditions, lead to the conclusion that they are the residue of a people who, together with the Kolarian races, occupied India proper prior to the appearance of the first Aryan invaders. It is now known that there are many Oraon villages in Chutia Nagpur in which the Oraon language is quite lost, but the inhabitants nevertheless speak two tongues, Munda and Hindi. The languages of the Hinduized aborigines of Chutia Nagpur appear to have followed their religion. All the tribes that have become Hindu in faith have lost their old language, and speak a rude dialect of Hindi. The Oraon in Chutia Nagpur follow the Munda paganism, and adopt the Munda languages; while the Munda, Ho, Santal, and other Kolarian tribes, who adhere to their ancient faith, have preserved their old language, or at all events a pre-Aryan tongue. Alaung Phra (Alompra) subdued the Mon or Talaing race in 1757-58, from which time the Burmese strongly discouraged the Mon language; and after the first war between the British and the Burmese in 1824-26, the Burmese forbade the Mon to be taught in the monasteries or elsewhere. The result has been that in little more than a century, the language of a million people has become extinct. In 1870, there were not one hundred families in Pegu in which it was used as their vernacular tongue, though still spoken in Martaban and in Mamlam-yang by the descendants of immigrants who reappeared there when the British became supreme. But it is not merely the language that is disappearing,—the Talaing people themselves are being absorbed by the more powerful Burmese race.

History.—No one of the races who were occupy-

ing India and South-Eastern Asia prior to the Muhammadan invasions, retain any strictly historical record of the routes by which they reached their present localities, or of the date of their respective advent. From the geographical distribution of the Kol and Dravidian languages, Mr. Hislop formed the opinion that while the stream of Dravidian population, as evidenced by the Brahui in Baluchistan, entered India by the north-west, that of the Kol family seemed to have found admission by the north-east; and as the one flowed south towards Cape Kumari (Comorin), and the other in the same direction towards Cape Roumania, a part of each appears to have met and crossed in Central India. The Karen of Ultra-India have a tradition of crossing a sea of sand, which is supposed to mean the desert of Gobi; but they have no knowledge as to the date of their migration. That the Mongoloid races have made great efforts to reach more hospitable climates, is shown by the presence of many tribes wedged into the mountainous region on the frontiers of India. On both sides of the Indus, in Baluchistan, Lower Sind, in Nepal, Bhutan, and Sikkim, are many hundred tribes, some of almost similar origin, yet forming distinct nations and using dialects unintelligible to each other, though of the same family of languages.

The linguistic affinity of many of the non-Aryan peoples of India, is shown by the fact that they take their tribal designations from their word for man in their respective dialects,—thus Bala-li, Mola-li, Dhima-li, Santa-li, Banga-li, the people of Bala, Dhima, Banga, etc.; and the very general term Mi (man) supplies the basis of the race name to not less than forty ascertained tribes,—thus the Du-mi, Ka-mi, Anga-mi, Mi-than.

The prior immigrants from the north have been termed Scythic, Turanian, Mongolian, Kolarian, Tamulian, and Dravidian. All these designations distinguish them from that branch of the Aryan races (Iranian, Indo-Atlantic, Caucasian, Mediterranean) now dispersed through India proper, called by Humboldt East Aryans or Brahmanic Indians. The West Aryans or Persians had separated and migrated into the northern country of the Zend, where they combined a belief in Ormuzd and Ahriman with a spiritualized veneration of nature. But the East Aryans came through the Panjab into India proper, and they have continued up to the present time to exert a great influence on the people. It was an immigration on the borders of historic times. Much connected with this people remains in obscurity, for they have been a non-recording race. Chevalier Bunsen supposes that they reached the land of the Five Rivers some time between 4000 and 3000 B.C.; but we have no standard whatever, from our present point of view, by which to estimate the length of the period from their immigration into the country of the Indus down to their farther advance to the land of the Saraswati. All we can say regarding them is, that peculiar habits of life were contracted in the land of the Five Rivers, and that, out of the elemental religion there instituted, allusions to which are found in the oldest Vedic hymns, the Brahmanical system, with a new mythology and the introduction of castes, gradually grew up on the eastern side of the Sutlej. That author is, however, of opinion that the period of the passage of the Sutlej and immigration to-

wards the Saraswati occurred from B.C. 3300 to B.C. 3000. Whilst they dwelt in the country of the Five Rivers, from B.C. 4000 to 3000, little change in their habits and belief seems, in his opinion, to have occurred. But about B.C. 3100 or 3000 their power on the Indus appears to have been broken, in consequence of some war with one of the surrounding kingdoms, and from the latter date India east of the Sutlej up to the extent of the Aryan conquests adopted Brahmanism. From that time the religious views, forms, and habits of Bactria were for ever abandoned by the East Aryan immigrants, and between B.C. 3000 to B.C. 1900 they extended their Brahmanical religion from the Saraswati to the Doab. It was this race who called the portion which came under their own rule by the name of Aryavarta, the abode of the Aryans. In classical Sanskrit it was also known as Bharata and Bharata-varsha, and also Jambu-Dwipa. But by the western nations, India east of the Indus was always India, and was never called Arya by any writer.

This Aryan or Sanskrit speaking colony of Brahmans, Kshatriyas, and Vaisyas found the greater part of Northern India peopled by rude tribes, whom they designated M'lecha, Dasya, Nishada, etc., and it is the received opinion that many of those prior occupants were of Scythian, or at least of non-Aryan origin. But to a much later period, and when the Aryans were in full occupation of the country from the Indus to the Ganges and into Bengal, all to the south of the Vindhya mountains continued to be occupied by Turanian races. An immigration into Ceylon of a colony of Aryans from Magadha took place about B.C. 550 (B.C. 543); and Wajeya, the leader of the Ceylon expedition, is said in the Mahawanso to have married the daughter of the king of Pandu. But now, unless Travancore be an exception, there is no large Aryan colony in any part of the south of the Peninsula of India, individual members of that race alone appearing scattered amongst the nations occupying it. There is nothing in history to show, nor is there in the physical appearance of the races to the east of the Ganges and of the Bay of Bengal anything to warrant, the belief that these East Aryan immigrants ever advanced, in masses, beyond their present locality north of the Vindhya range.

Brahmanic Life.—They brought with them views as to the gradations of social rank, against which, up to the present day, all other races and even their own reformers have been repeatedly striving; but they likewise brought larger intellect, letters, and a higher civilisation, not only enabling them to hold a position of superiority, but to inspire the prior races with the desire to be enrolled amongst the Aryan classes of Brahmans, Kshatriya, Vaisya, and Sudra. These East Aryan immigrants throughout all India proper possess the lands best suited for tillage, and in Travancore they are the sole landlords. When they first reached the Panjab, they depended on their horses. Arrived in India, they tamed the elephant, which finally rivalled the chariot. In the time of the Mahabharata, B.C. 1400? Bhagadatta, Uttara, Duryodhana, Anvinda, and others fought on elephants. At the time of Alexander's invasion (B.C. 327) elephants had almost completely superseded cars. And in their wars they placed the infantry in the

centre, and the horse and elephants on the flanks of their armies.

The date of the Rajputs' appearance in India proper is even more obscure. The Lesser Sind river now marks the eastern boundary of Rajputana, as does the river Indus that to the west, its limits being lat. 23° 15' to 30° N., and long. 69° 30' to 78° 15' E., an area of 123,000 square miles, inhabited by a population of ten millions of souls. The north-eastern Panjab and Cis-Sutlej district seems to have first been a Brahman before it became a Rajput country, and subsequently to have been advanced upon by the Jat. The great seat of Rajput population and ancient power and glory was, however, on the Ganges. When vanquished there by the Muhammadans, after the 12th century, the principal Rajput families retired into the comparatively unfruitful country to which they give their name. But even in Rajputana proper, though it has Rajputs for the dominant race, the population is much more Jat than Rajput, the Jat extending continuously from the Indus to the Ganges. Before the Rajputs were driven back from Ayodhya and the Ganges, Northern Rajputana had been partitioned into small Jat republics, and the Jat still form the most numerous part of the population and possess the largest share in the cultivation, though they share the more open parts with the Mina, the remains of the Saraswati Brahman population, and the dominant Rajput. The southern and more hilly parts of Rajputana are much occupied by the Mina, the Mhair, and the Bhil, and Malwa is occupied by Rajput, Kunbi, and Jat, the Charun and the Bhot races being also there. Rajputs and Jat occupy the plains south of the Salt Range. In the valley of the Ganges, the body of the Rajput population lies next to the Jat race to the east; in the Middle Doab, Rohilkhand, and Oudh, and still farther east, the country is shared by a Brahman population. In Lower Rohilkhand, where they are called Thakur, as also in Western Oudh, Rajput communities are strong and numerous; in Eastern Oudh, especially on the broad tracts between the Gogra and Ganges, there is a great Rajput population, and they are pretty numerous to the east of Oudh, in Azimghur and Ghazipur. They are also numerous in Mynpuri, Futteghur, and Etawa; and Baiswara, the country of the Bais Rajputs, lies almost parallel to the Brahman country of the Lower Doab.

The Getæ, the Jat, Jut, or Jit, and the Takshak, from the Sakatai or Chaghtai region, now occupy places amongst the 36 royal races of Rajputana. The Puranas furnish certain points of information regarding their earliest migrations, and the histories of Mahmud and Timur acquaint us with their later efforts. They expelled the Greeks who remained after Alexander's departure. Between the time of Cyrus, six centuries before Christ, when Tomyris fought for independence, and the rise of Timur (A.D. 1330), although twenty centuries had elapsed, the great Getic nation was little circumscribed in power. Under this last prince of the Getic race, Taghalaq Timur Khan, the kingdom of Chaghtai was bounded on the W. by the Dhasht-i-Kipchak, and on the S. by the Jaxartes or Jihun, on which Timur, like Tomyris, had his capital. Kojend, Tashkund, Ootrar, Oyrapoli, and the most northern of the Alexandrian cities, were within the bounds

of Chaghtai. The Massagetsæ, Getæ or Goths, seem gradually to have advanced from their ancient limits into the more fertile districts of Asia, and to have been driven in successive wars across the Sutlej. They are now spread throughout the Indus valley, from the mountains of Joud, through Sind, to the shores of Makran, and up to the valley of the Ganges. They long preserved their ancient habits; appearing as desultory cavaliers under the Jit leader of Lahore, they made a brave stand for independence against the British under the Jat ruler of Bhurtpur and the successors of Ranjit Singh, while Dholpur state is still Jat. In Bikanir and the Indian desert, in the desert tracts E. and W. of the Indus, they are camel and cattle breeders, but cultivate in the valleys and fertile oases wherever tillage is possible.

The *Kathi*, another ancient Scythic race, are the ruling tribe in Kattyawar. The Malli and the Katheri of Multan opposed Alexander's advance; 1300 years afterwards, Mahmud was opposed by a race of the same name, and they must have preserved their ancient spirit to have been so long able to offer a front to the formidable armies of so furious an enthusiast. Their laureate bards still style them 'Lords of Multan and Tatta,' and they repeat couplets descriptive of their emigrations from Multan, their temporary settlement in the tracts called Pawin, N. of the Runn, and telling of their leader, Megum Rao, conducting the first Kathi colony across the gulf into Saurashtra, eight hundred years ago; and so predominant was their power, that it changed the ancient name of the Peninsula from Saurashtra to Kathiwar.

Parsees occupy a prominent place in the W. of India. In the eighth century (A.D. 717), a small body of W. Aryans emigrated from Ormuzd, and landed at Sanjan, 25 miles S. of Damaun. They were a mere remnant of the ancient followers of Zoroaster, and though still few in number (69,000), they have distinguished themselves in W. India by commercial enterprise.

The information regarding the more important immigrations into W. India, as will have been observed, is still so vague as to justify Mr. Elphinstone's remark (i. p. 19), that until Alexander's conquests, the dates of events are all uncertain; and again, from that time till the Muhammadan invasion, a connected history of this country cannot be given.

A Bactrian dynasty for nearly a hundred years held a considerable portion of the Indus territory, but in the early centuries of the Christian era there was a great upheaving of the nations in India proper. During the khalifat of Umar, history records an expedition from Arabia by the route of Baluchistan. From the eleventh to the eighteenth centuries there were repeated inroads of Moghuls, Turks, Persians, Afghans, and Arabs, led by Mahmud, Timur, Baber, Nadir Shah, and Ahmad Shah. Their military followers seized on kingdoms, provinces, and royalties, and in British India, in 1881, their descendants and those of their converts numbered 50,121,585 souls.

As the Muhammadans' power declined, the Mahrattas, a Turanian race, led by Aryan Brahmins, rose to full, though brief, dominion, and have been succeeded by Christian races from W. Europe. The Danes have ceased to retain any territory in the E. Indies. The French, however, in India proper still hold Chandernagpur, Kari-

kal, Pondicherry, Yanam, Mahe, with eight other smaller settlements, comprising an area of 178 square miles, and a population of 285,022 souls, and they are now dominant on the Mekong river in Ultra-India. Portugal, on the W. coast of the W. Peninsula, at Goa, Damaun, and Diu, has 1066 square miles, with a population of 369,788 souls, and that nation occupies Macao in China. The Dutch have left India proper for Indonesia, where their great possessions amongst the Archipelago islands from Sumatra to New Guinea occupy 455,411 square miles, with a population of 17,952,803 souls,—Malay, Negrito, Papuan, Muhammadan, Christian, and Pagan. The Spanish Indies are likewise in Indonesia, in the Philippine Archipelago, most of the population being of the Negrito race, and almost all proselytes to Christianity. Nothing is known of the date of advent of the multitude of peoples of Mongoloid origin occupying the region from the N.E. part of the Himalaya, southwards to the seas of the Archipelago.

Language.—Dr. Hunter, at page 20 of his Comparative Dictionary, has put forward the opinion that the aboriginal races of the E. Peninsula, Burma, and India N. of the Vindhya range derived their speech from a source common to them and the Chinese (p. 22),—not only the terms for common natural objects and for the civil institutions of a primitive race, but also a part of the nomenclature of tillage, and even such terms of civilisation as road, yam, etc.

The Jaina and Buddhist religionists number in British India 4,640,780; the great bulk of them (3,251,584) being in British Burma. The Sikh religionists, converts from the Jat race, are almost two millions (1,853,426), and are nearly all in the Panjab; and of the Christians, 1,862,684 in number, 711,080 are in Madras, in which tradition asserts there have been converts since the days of St. Thomas the Apostle. The small body of Parsees, and a still smaller number of Jews (7600), are mostly in the west parts of the Peninsula.

Amongst most of these eastern races, the birth of a boy is greatly more prized than that of a girl. Their daughters are occasionally neglected, and, amongst some of the Rajput tribes, even destroyed. The proportion of girls to boys was found by the census of 1871 to be low. Amongst Hindus the range in the several provinces was from 72·95 to 97·37 girls to 100 boys, and amongst Muhammadans from 80·92 to 95·18.

It is quite an oriental custom for the population to arrange themselves into separate communities, each with an independent life, and intermeddling as little as possible with events that do not disturb its internal condition. Under this system a man's country is the guild or community in which he is born, and the people recognize as the supreme authority whoever happens to be *de facto* ruler. Such race and communal isolation is common to all the populations of British India proper, but it has been widely extended by the system of minute castes which the East Aryans brought into India. Many of the prior races, while continuing the race guild, or clinging to a religious sect, resent the Brahmanical arrangement, and the census of 1871 showed, in British India 8,712,998 persons not recognising caste, or designated out-castes. The geographical, historical, and economic notices of

INDIA ; ITS AFRICAN RELATIONS.

the countries in Eastern and Southern Asia will be found under their alphabetical arrangement. This article relates solely to their ethnic features.

—*Logan in Journ. Ind. Archipelago*; *Bunsen*; *Max Muller*; *Hunter's Comparative Dictionary*; *Tod's Rajasthan*; *Humboldt's Cosmos*; *Dalton's Ethnology*; *Yule's Cathay*; *Rawlinson's Herodotus*; *Dr. Caldwell*; *Sir Walter Elliott*; *Prinsep's Antiquities*; *British India Census*; *Elphinstone's Hist. of India*.

AFRICA. From pre-historic times, Iranian, Turanian, Mongol, Turk, Hamite, Semite, and Negro races have been continuously adding to the inhabitants of India and the Eastern Archipelago. Of the races occupying Africa, ethnologists recognise three distinct ethnical divisions,—that of the woolly fleecy-haired, woolly tuft-haired, and lank curly-haired; and six linguistic divisions,—Semitic, Hamitic, Fulah-Nuba, Negro and Negroid, Bantu, and Hottentot Bushman.

The Fulah of Senegal and the Upper Niger, as well as the Nuba of the Nile region of Darfur and Kordofan, are considered of indigenous African race; but they are very superior to the Negroes, and seem to be the intermediate agents of Muhammadan civilisation. South-Western Asia is the original home of the Hamite and Semitic branches of the Caucasian race; but they have intruded into Africa, and now occupy the whole of its northern part as far as the Soudan and the east coast districts north of the equator. Of the two, the Hamite were the first to become dominant there, but they are in no way akin to the pure African.

The Semitic populations in Asia are the Arabians, Syrians, and Samaritans; in Africa, the Abyssinians of Tigre and Amhara, Agow Falasha, and Gafat. Several branches of this race have played a distinguished part in the history of the world. Conquest and commerce, but chiefly the former, have greatly diffused them. They have gone northward and eastwards into Persia, Central Asia, India, and China; small parties are located in India proper, Ultra-India, and Indocnesia. In Asiatic Turkey, there are about 1,500,000 Arabs and others of the Semitic group. They conquered and migrated westerly along the north of Africa and into Europe, and they ruled in Spain for 700 years, but were again driven back into Africa; and now representatives of the Semites and Hamites are found differently mixed in Egypt and Abyssinia, all over the Sahara, and in the Arab and Moorish states; and the races in Morocco have been stated as under:—

Berber and Tuarik,	2,300,000	Jews,	830,500
Shelluk or Shellook,	1,450,000	Negroes, Mandingos,	120,000
Moor and mixed Arab,	3,655,000	Christians,	300
Bedouin and other		Renegades,	200
pure Arabs,	740,000		

The Berber include the Libyan, the Moor, the Numidian, and Gaetulian of the old geographers.

The Berber and Shelluk are untamed, warlike tribes, dwelling in the mountains; when possible, rovers of the sea; claiming fanciful origins, but impatient of any subjection. They are the same race as those whom the French call Kabyle and Zouave. The Moors are little idle men, who grow fat from indolence; they are lowlanders, traders, dwellers in cities, avaricious, perfidious, cowardly, cringing, and insolent. The Riff-dwellers of Kalliya, Cape Tres Forcas, corre-

spond to the Arab Suaheli on the Red Sea coast, the names being from Ripa, a bank, and Sahilah, a sea-shore.

In Morocco, the Berber continue pure, free from Arab blood, and still call themselves Mazig. Their language is termed Shelluk, or Tamashigt. The Algerian Kabyle or Qabail are pure Berber. They are the old Numidians, and differ in language, form, and habit from the Arabs of the plains. Their number is about 700,000; they have a federal republic, the old Quinque-gentes who gave so much trouble to the Romans, who tried the soldiiership of Maximilian, and sixty years afterwards again revolted.

In Tunis the Berber are called Suawua, and south-east of Tunis they receive the name of Jabaliya. The inhabitants of Suiva, the oasis of Jupiter Ammon, the Garamantes of ancient geography, are likewise of Berber origin, as also are the Teda or Tibbu of the Eastern Sahara.

The Sanhadsha of the Western Sahara are Berber. The Tuareg of the central region of the great African desert, who call themselves Imoshag, are Berber.

The Tuareg nomade in the Great Desert are very fair, with long hair, aquiline noses, high foreheads, and thin lips. They say their prayers in Arabic, and speak a Semitic tongue. Their arms consist of a long lance with a broad head, javelins 6 or 7 feet long, with jagged hooks at the pointed end, a round buckler (darega) of buffalo or elephant hide from Soudan, and a poniard and broad-bladed scimitar.

The Arabs of Morocco are the Moors of Spain, the Saracens of France,—tall, graceful sons of the desert, courteous, brave, hospitable, and confiding,—descendants of the conquerors who in the first ages of the Hijira propagated the religion of Mahomed, crossed the Straits of Gibraltar, destroyed the Gothic chivalry, reigned in Spain for 700 years, invaded France, devastated Italy, and pillaged the suburbs of imperial Rome. When the last Arab king submitted to Ferdinand and Isabella, and the Moorish palaces of Granada were surrendered to the Christians, the old conquerors went back to Africa, and resumed their nomade life. In Tripoli, the Arab has monopolized the country. In Tunis, the native reappears in a smaller proportion, and in Morocco he is very scarce.

Abyssinia was peopled by Southern Semites, who crossed the Red Sea from Yemen and Hadramaut before the Arab conquest of Egypt. They were converted to Christianity in the 4th century of the Christian era, and in the 6th they re-crossed over to Arabia, to avenge the persecution of Christians by a Jewish ruler, conquered Yemen, and marched to the gates of Mecca, where they were overthrown two years before Mahomed was born. Such partial migrations and conquests have left tribal bodies from other races in the land.

The Adal tribes, also said to be a Semitic race, dwell on the west of the Red Sea. They call themselves Afar, but by the Arabs they are called Danakil, from their chief tribe Ad-Alli; and Dr. Krapf was of opinion that this Afar is the Ophir of Scripture.

The Danakil, pl. *Dunkali*, are a Hamite race who inhabit the most southerly African shores of the Red Sea as far as the Straits of Bab-el-Mandeb.

The *Eloikob* or *Wa-kuafi* and the *Masai*, also Hamite races, are the terror of all Negro tribes in equatorial East Africa, on account of their wars and kidnapping expeditions.

The *Somali*, another Hamite race, occupy the eastern promontory of Africa from near Bab-el-Mandeh to the Juba on the Indian Ocean, and they border on the Galla district on the west. They have a woolly head of stiff thick hair from 6 to 8 inches long, and which is said to be always crimped.

The *Fellaheen* peasantry of the Lower Nile, and the Coptic Christians of the towns of Egypt, represent the ancient Egyptians. These are also represented by the Berabra or Berber of the Nubian Nile districts, who were Christians until the fall of the Berber-Nilitic empire of Dongola in A.D. 1320. Between the Nubian Nile and the Red Sea are the Bisharin, the Hadendoa; and some of the Beni Amer, who, in addition to a corrupt Arabic, speak Tobedaue, a more ancient Hamite language with three genders.

The inhabitants of *Shoa* are about 2,500,000, of whom one-half are Christians, the Amhara, and the remainder partly Muhammadan and partly Galla. The Christians are a stout, well-formed race, from 5 feet 7 inches to 5 feet 9 inches in height, with luxuriant silky black hair.

The *Galla*, a Hamite race, call themselves Orma or Oroma. The word Galla means immigrants, and Orma means strong, brave men. They are partly distributed in Abyssinia, and partly in a compact body in the east of the interior of Africa. They live in a beautiful country, extending from lat. 8° N. to 3° S., with a climate not surpassed by that of Italy or Greece, and speak a language as soft and musical as pure Tuscan. They are from six to eight millions in numbers. They are one of the finest races in Africa, of a dark-brown colour, with strong hair, and well limbed. They are a warlike, manly people, conscious of their own strength, and of a moral and noble character. Their beards are tolerably luxuriant, and their features regular and agreeable. With the exception of the southern tribes, they and their wives always appear mounted either on horses or on oxen.

Amongst them are scattered Christian tribes, but the religion of the race in general is fetich, and the seven tribes of the Wollo Galla are Muhammadane. The fetichists worship the serpent as the mother of the human race, and hold their religious services under a tree. They acknowledge a supreme being, whom they call Mulungu, and have a notion of a future state. There seem to be three natures or attributes in their supreme being, viz. Wak or Waka, supreme; Ogli, a masculine, and Ateli, a feminine, power or embodiment. They have two holy days in the week, viz. Saturday, which they call Saubatta kenna or little Sabbath, and Sunday, which is their Saubatta gadda or greater Sabbath.

The *Negro* race families inhabit Africa from the southern margin of the Sahara as far as the territories of the Hottentots and Bushmen. They extend from the Senegal across to the Upper Nile, including the Upper Guinea coast; but they have been driven from the extreme eastern parts of Africa by intruding Hamite and Semitic families. The Negro tribe speak a number of apparently distinct languages, which cannot be

reduced to one system; but the people themselves are of one type, and that type quite different from those dwelling north and south of them.

The majority of the Negroes have high and narrow skulls, a prominence of the upper jaw, prominent lips, and an oblique position of the teeth. But the variations are very great. The colour of the skin ranges from ebony black, as in the Joloffer, to the light tint of the *Wa-kilema*; and Dr. Barth even mentions a copper colour of Negroes in Marghi. Winwood Reade says the typical Negro is rare even among Negroes. In many tribes the jaws are not prominent, the lips are not swollen, and the nose is pointed straight or hooked.

The *Bantu Negro* family occupy Central Africa, from lat. 5° N. Its eastern tribes are the people of Zanzibar, the Suaheli, the Mozambique nations from the coast to Lake Nyassa, the Betschuan inland, and the Kafir, with other little known tribes farther to the west.

The *Soudan Negro* family occupy from the Niger to the White Nile. The tribes are numerous,—Ibo, Nuffi, Ewhe, Otahi, Joloffer, Sererer, Fulke, Sourhay, Hausa, Kanuri, Bagrimma. In the towns of Darfur and Kordofan, both Arabic and Barabrie are spoken. The lowest of all Negro tribes inhabit the district of the White Nile.

From lat. 11° southwards, we find the Shelluk, the Nuehr, the Dinka; and west of the last are the Luoh (Djur), the Bongo (Dohr), and the Sandeh (Niam Niam). The Luoh and Bellanda are offshoots from the Shelluk. The Dinka and Shelluk Negroes closely resemble the Fundi Negroes on the Blue Nile, the founders of the kingdom of Sennaar in the 16th century, which they maintained for three centuries. The Fundi and the Bertha Negroes are directly allied in physical characters, language, and manners.

The *Zanzibar* dominions comprise that portion of the coast included between Magdashoa, in lat. 2° N., and Cape Delgado in long. 10° 42' S. Beyond them, to the N., are the independent Somali tribes, which extend almost to the Red Sea, where they meet the Dankali race; and on the S. they are bounded by Mozambique. The extent of coast under the dominion of the Sultan of Zanzibar is about 1100 miles, but the most valuable parts of his sultanate are the islands of Zanzibar (containing the capital of the same name), also called Ungujo, Pemba, and Monfia. The first is situated at a distance of from 20 to 80 miles from the mainland, and is in size about equal to the Isle of Wight. It contains none but small streams.

The coasts of the mainland are called *Us-Suahil*, and its inhabitants, without distinction, *Suahili*. The population of Zanzibar island is about 250,000 souls, comprising (1) the Arab landed proprietors, the ruling race, who are enterprising and intelligent, but dirty, ignorant, and bigoted, dishonest and unprincipled; (2) a race of mixed descent; (3) natives of the Comoro islands, brave and industrious; (4) natives of the W. coast of Madagascar; (5) Arabs from the coast of Hadramaut, patient and industrious; and (6) Arabs from Oman, a troublesome, turbulent, and plundering race. Southwards from this,

Indians.—About 4000 Muhammadans and Hindus from British India have settled at Zanzibar, Baamoyb, Pemba, Quiloa, Dar-n-Salam, on the E. coast of Africa, also in Madagascar, at Nossi Bei,

and Marotta. "The Muhammadans are of the Khoja, Bohra, and Mehinan sects, thrifty and industrious races, who have their families with them. The Khojas settled in Zanzibar about the middle of the 17th century, and are chiefly from Cutch, Jambaggur, Surat, and Bombay. They number 535 families, governed by a council of five elders, and they annually remit about £6000 for religious purposes to the head of their sect in India. There are 2000 in Zanzibar, 137 in Baamoyo, and a few in Pemba, Quiloa, and Dar-u-Salam.

There are 250 families of the Bohra sect of Muhammadans in Zanzibar, 142 at Mombas, 51 at Pemba, 42 at Lamu, and 21 at Malinda. Their ancestors emigrated from Surat in the 17th century, and settled on the N.W. coast of Madagascar for trading purposes. They are guided by a maula in spiritual affairs.

The Hindu merchants there are of the Bhatti and Banya castes, from Cutch and Jambaggur. They are engaged in business in all the towns and villages in the mainland, also at Mozambique, Eboos, and other Portuguese settlements; they never bring their families with them. Their number in 1872-73, in Zanzibar, was about 474.

Lieutenant-Colonel C. P. Rigby, writing in 1860, mentioned that 19,000 slaves had been brought to Zanzibar from the adjoining coast of Africa; the adults were sold at from £2 to £7, and boys or girls from £1, 5s. to £2, 10s., the majority being from the great tribes of M'Nyassa, Miyan, and Magindo. The tribes to the N. of Mombassa were too fierce and warlike, and the Somali and Galla are never made slaves. In Zanzibar, in 1872-73, African slaves formed the greater part of the population. Slavery since abolished.

The language spoken in Zanzibar is Ki-Suaheli, called by the Africans Maneno Ungoja, and dialects of it are spoken over a vast extent of E. Africa, from the limit of the Galla and Somali country, in about lat. 3° N., to as far S. as the Zambesi. It is soft and pleasing to the ear, without any guttural sounds. It is written with Arabic letters. A corrupt Arabic is also current.

Mr. R. Cust adopts the opinions as to African languages of M. F. Muller of Vienna. He says that among the Semitic, some, like the Old Punic and Old Abyssinian, are dead; others, like the Arabic, Amharic, and Tigree, are living vernaculars. Among the Hamitic, Old Egyptian and Coptic are dead; but Berber, Kabyle, Tuareg, Galla, Somali, and others are spoken by millions. The Fulah-Nuba languages are spoken by conquering races, some of whom have adopted Muhammadanism; they stretch from the Atlantic on the N. fringe of the Negro races, across the continent to the basin of the middle Nile. The Fulah have extended into the heart of Negroland, and are found everywhere. The Negro race extend across the continent S. of the Sahara desert and N. of the equator, and reach from the Atlantic to the equatorial lakes. Their languages are numerous, totally distinct from each other, and of many we know little or nothing. The great Bantu race occupy the peninsula of Africa from the equator southward, leaving a corner for the last family. The diverse languages of these numerous and powerful races, of whom the Zulu and Kafir are so well known, can be traced back to one common mother language, which has perished. The Hot-tentots and Bushmen represent all that remains

of the original earliest inhabitants of the continent. They have been pushed forward by the Bantu, and nearly destroyed; their languages are totally distinct from each other.

Religions.—In Africa, the Semitic race are found as fetish-worshippers, Christians, Muhammadans, and Jews. Abyssinia is Christian, with the chief truths of the Bible blended with merely human notions. The early Arab religion was Sabæanism, a worship of the heavenly bodies, mixed with idolatry, but with Mahomed commenced the Arab conquests, the creed, science, and literature, and now all N. Africa is Muhammadan. When the Arab conqueror Akbah had overrun the states of Barbary from end to end, and, after passing through wildernesses in which he or his successors were one day to found the literary and commercial capitals of Fez, Kairoan, and Morocco, had reached the point where the Atlantic and the Great Desert meet, spurring, so it is said, his horse into the waves of the Atlantic, and raising his eyes to heaven, he exclaimed, 'O Allah! if my course were not stopped by the sea, I would still go on to the unknown kingdoms of the west, preaching the unity of thy holy name.'

Throughout Central Africa fetishism prevails. The Bantu Negroes have ancestor-worship, shamanism, and trial by ordeal.

Suahili offer food to the demon of disease. They do not eat it themselves, but place it on some footpath that a passer-by may consume it, and thus take the pestilence on himself.

TURKEY IN ASIA may be taken to include Syria, Mesopotamia, parts of Armenia, Asia Minor proper, and the Arabian peninsula. These regions are occupied by three distinct races,—the Ural Altaic, the Aryan, and the Semitic.

The *Ural Altaic*, in addition to a few Kazzilbash, comprise twelve millions of Turk who speak Turki, and are Muhammadans; also three millions of the Turkoman tribes who speak a Turk tongue.

The *Aryan races* are the Hellenes or Greeks, the Armenians, and the Kurd. The Armenians, three millions in number, are of the Orthodox and United Armenian sect, and speak the Armenian tongue; the Hellenes, two millions in number, speak the modern Greek, and are of the Orthodox and United Greek Church; and the Kurd, one million in number, speak the languages of the Kurd and Zaza, and are chiefly Muhammadan in faith.

The Arab 1½ millions, the Maronite 300,000, and the Druse 40,000, are the races of Semitic origin who speak Arabic, but the Arab are Muhammadans, the Maronite are of the United Syrian Church, and the Druse are pagan.

The *Anatolian Turk* are a lusty, stalwart race, of rude manners and harsh utterance, but frugal, patient, much enduring, kindly, hospitable, and tolerant in religious matters. They have an earnest, taciturn temperament, with much sound understanding and shrewd observation, but are defective in foresight and business habits. Hence they make, as a rule, indifferent merchants, and most of the wholesale trade has thus fallen into the hands of the rival races. In the country districts they are agriculturists and stock breeders, and in the towns, dealers in smallwares or craftsmen. Military service weighs heavily on them, and with polygamy prevents their increase.

The *Greeks or Hellenes* are industrious traders,

shrewd, calculating merchants, excellent seamen, intelligent agriculturists, and monopolise the learned professions. The Greek race in modern times everywhere displays a praiseworthy zeal for the spread of education.

The Armenians still exist as a distinct nationality in the N.E. highlands of Anatolia, and are sparsely diffused throughout Southern Asia, from Constantinople to Ultra-India. They are constitutionally timid and reserved; rarely appealing to arms in self-defence, they yield submission to the strongest. But they are, intellectually, almost on a level with the Greeks, outwitting them in commercial enterprise, ruling the money market, and are keen, perhaps cunning, traders. They habitually speak Turkish like a second mother tongue, their own language belonging to the Iranian branch of the Aryan family.

Armenia has no political existence. Its ancient bounds were between lat. 36° 50' and 41° 41' N., and long. 36° 20' and 48° 40' E., but it is now divided between Persia, Russia, and Turkey. The people live in good houses, are industrious traders, and its peasantry are powerful and robust. Their women are on equality with the men. On marriage, the women are silent till the birth of a child. They became Christians in the 4th century, but separated from the Greek Church in A.D. 526, and are now under a Catholicos or Patriarch. Their language, the Haik, is written with an ancient and modern character.

The Kurd highlanders are the descendants of the fierce Carduchi of Xenophon. They belong to the Iranian branch of the Aryan stock, and linguistically approach nearer to the Persian than to the Armenian subdivision. They are undoubtedly brave, but restless and unruly, often treacherous, lawless, and bloodthirsty. Half-savage Kurd tribes occupy the uplands about the head-streams of the Tigris and Euphrates. They form a disturbing element in Asiatic Turkey, which is continued from Kurdistan southwards to Arabia by the restless nomade Bedouin Arabs of the Syrian desert, and of the plains watered by the Tigris and Euphrates. Nominally they are subjects of the Sultan of Turkey, but the Shamara, the Beni Lam, and other powerful tribes maintain an ill-disguised standing feud with the authorities, often disturbing the right bank of the Euphrates, from about the parallel of Aleppo all the way to the Persian Gulf. If united, they might easily bring from ten to twenty thousand formidable mounted warriors into the field, but tribal dissension neutralize their power, and enable the Turks to keep them under.

Yi-li or *Dasseni* and *Jacobites*, a religious sect in Armenia, but chiefly in the Bashka province in the pashalik of Musal and the Sinjar Hills. Their religion is a mixture of devil-worship, with the doctrines of the Magi, Christians, and Muhammadans. Their greatest saint is Shaikh Adi, who is supposed to have lived about the 13th century, and is believed to have written a sacred book, 'Aswad,' or the 'Black.' They consider the devil the chief agent in executing the will of God. They reverence Moses, Jesus, and Mahomed, as also the Christian and Muhammadan saints and prophets. They adore the sun as symbolical of Jesus. On the 10th of the moon in August they hold a meeting at the tomb of Shaikh Adi for a day and a night. All men and

married women are present, and the intercourse is said to be promiscuous. At the village of Shaikh Adi is the brass figure of a peacock, which they call Malik Taus, king peacock, and they venerate it as representing David and Solomon. They circumcise on the eighth day. They place the body of their dead on its feet, touch the neck and shoulders, and strike with their palm the palm of the deceased, saying, 'Ara-Bihisht,' Away to paradise.

Tiari, a tribe, about Sulamary, of Nestorian Christians, with about 10,000 men.

Mendajaka, disciples of John, a religious sect in small communities in Basia, Kurnah, Mahanra, and Shaikh-ul-Shayok. Their religion is a mixture of paganism, Hebrew, Christian, and Muhammadan. They have a book called Sidra, and also the Psalms of David. They respect the town of Mecca, and more so one of the pyramids, beneath which they say their great progenitor, Saba son of Seth, is buried. The priests baptize, and use the Chaldee language in all their ceremonies.

BLACK SEA, CAUCASUS, AND ARMENIA.—The great Asiatic highland south-east of the Black Sea and south-west of the Caspian has ever been remarkable for its numerous races, and is now a well-head of nationalities, where the people promise at no distant period to combine into new nations. This region is enclosed on the west by the torrent river Kizil Irmak, the Ilalys of the ancients; on the south it has the Tigro-Euphrates valley and its border-lands; on the east are the desert tracts of Central Persia; and on its north, the Black Sea, Russian Georgia, and the Caspian Sea. The highland is formed by several entangled mountain chains, apparently belonging to, but somewhat apart from, the Caucasus, from which it is separated by the wide valley of Georgia, and the plains watered by the Rion or Phases and the Araxes. These highland mountains run N.W. and S.E. from the Anatolian coast beyond Trebizond, to the lofty peak of Demavend, and the neighbourhood of Tabreez or Taurus. It comprises parts of Turkey, Russia, and Persia, the whole east of Anatolia, with Northern Kurdistan, both of which belong to Turkey, the Russian provinces of Eriwan and Karabagh, with the Persian province of Azerbaijan, and in their central point is the double cone of Ararat, covered by never-melting snows. The soil is fertile up to 6000 feet, and produces all kinds of cereals, with the 'yaila' or pasture lands of vast extent, and clothed with excellent grass, rising still higher. In the valleys below are the vines, fruit trees, maize, rice, tobacco, and varied cultivation, alternating with forests in which grow the ash, walnut, box, elm, beech, oak, fir, and pine, and amongst its minerals are iron, copper, silver, and lead. From its valleys flow the great rivers Choruk, Araxes, Tigris, and Euphrates, with all their countless tributaries, with other water-courses, some for the Black Sea, some to the Caspian, some to the Mediterranean, and some to the Persian Gulf. The population of that mountain tract is made up of Armenians, Turkomans, and Kurds, and until recently did not exceed fifteen to the square mile. But to avoid the pressure of Russian rule, many of the Turkomans from the N.E., and many Circassians, have crossed into the Turkish dominions, and many Turkomans also have joined from Persia.

CAUCASIA consists of the narrow neck of land separating the Euxine (Pontus) from the Caspian Sea, and connecting the S.E. corner of Europe with S.W. Asia. It is inhabited by highland tribes of various races, dwelling in the closest proximity, hemmed in on the north by Russian Slav, and southwards by the Armenian, Kurdish, and Persian Iranians. In comparatively recent times, Tartars and other immigrant races have penetrated into the Kura, Terek, Kuma, and Kuban basins.

In the Southern Division are upwards of a million of people,—the Georgian, Imerian, and Raohan in Imeria; the Mingrelian, Gurian, and Lechgum in Mingrelia; the Laz in Lazistan; the Svan in the Upper Ingur; and the Pahav and Khevsur near the sources of Alazan and Yora.

In the Western Division, on the left bank of the Kuban, on the coast of the Euxine, and N. and E. of the Elburz, are the Cherkess, Abkhasi, and Kabard, 138,000 souls.

In the Eastern Division, the Chechenz, 164,000, occupy the right bank of the Terek, and the Leaghi, 517,000 in number, dwell in Daghestan.

The Oss or Osseti, 110,000, hold both slopes of the Great Caucasus about Kazbek.

The Georgians alone are of historical interest.

Caucasia Inhabitants.

Kartvelian stock—Georgians, Imerians, Mingrelians, Svans, Pahava, Khevsur, . . .	1,150,000
Laz (Sunni),	20,000
West Caucasian stock—Cherkess, Abkhasian, Kabard,	138,000
East Caucasian stock—Chechenzes, Leaghi, . . .	164,000
Semites—Jews,	30,000
Slav stock—Great Russians, Little Russians, Bulgarians, Bohemians,	1,500,000
Iranian stock—	
Ossi,	110,000
Armenians,	720,000
Kurd, Tat, and Talish,	380,000
Greeks and Germans,	50,000
Mongolo Tartar stock—Tatar, Nogai, Turkoman, Kumik, Kirghiz, Turk, Kalmuk, . . .	1,550,000
Christians,	3,560,000
Muhammadans,	2,200,000

Of all the Turki peoples, the Uzbaks are the most civilised, and, besides the Usmanli, they are the only Turki people who possess a written language and a literature. The Chaghtai, in which Baber wrote his memoirs, is still the standard literary language of all the Central Asiatic Turki peoples.

Kara Kalpak, or black caps, are a fertile race.

Kara Kirghiz are the Burut of the Chinese and Kalmuk. They live partly in Zangaria and Turkestan, and partly in the Western Altai. They speak an almost pure Turki dialect. Kara Kirghiz and the Kazak or Kirghiz Kazak represent respectively the highland and lowland nomade elements all along the northern and eastern border-lands of the Aralo-Caspian basin. The Kazak do not acknowledge the appellation of Kirghiz, which the Russians affixed to their name to distinguish them from the other Kazak.

Tajak are the original Iranian element, settled in all the arable land.

Sart is the term applied to the settled inhabitants. Its meaning is not known.

CIRCASSIA is the Cherkess of Asiatics. It is a mountainous country in the S.E. corner of

Europe, on the northern face of the Caucasus, lying between lat. 41° 50' to 45° 20' N., and long. 37° to 47° 20' E., about 550 miles long and 75 miles broad; area, 40,000 square miles. The highest summits for nine months are covered with snow. In a small tract not less than seventy-two dialects are spoken. The Cherkess and the Che Chen are the two great tribes. They take the common name of Adighe; but the Cherkess include amongst them the Kabard, Abkhas, Uiche, and other clans, and number 400,000 to 500,000 souls. The Che Chen number 150,000 souls. Their religion is a mixture of Christianity, Muhammadanism, and paganism. They reverence Merem, a benevolent deity, and Tschible, the spirit of thunder. There are three social classes,—Usdi or nobles, Tschfokot or freemen, and Pschilt or slaves,—and these are hereditary, like the castes of India. On occasions when their forts or villages have been surrounded, they have destroyed their women and children, set fire to their dwellings, and perished in the flames rather than surrender.

Their young women are famed for their beauty, and are sought for in the neighbouring kingdoms. They are brought up in simple and domestic habits by their mothers, are taught the use of the needle in decorative works, and to make their own clothes, and those of the men of their family, and are otherwise very carefully reared. They are sold to the bridegroom and to traders.

The Cherkess or Circassians were typical representations of the West Caucasian races. They were the most powerful and warlike of all the western nations. Since their final reduction in 1864 by Russia, most of their lands on the left bank of the Kuban have been occupied by their conquerors, the great bulk of the Cherkess having withdrawn into Turkish territory, and dispersed over Armenia, Asia Minor, Syria, and the Balkan peninsula. Similarly, 20,000 Abkhasians emigrated to Turkey at the close of the last Russian war, and both races have become predatory. Cherkess are to be found in Asia Minor along with Lazi, where also are the Yuruk, a nomade Turk race occupying the uplands between Erzerum and the plains of North Syria. Kazzilbash also are there, and are scattered over Anatolia, Persia, and eastwards to Kabul. They call themselves Eski-Turk or old Turks. The fertile plains of Raz Ova and Ard Ova near Tokat, and the villages between Angora and Amasia, and between Kara Hissar and Tokat, are the Kazzilbash headquarters. They profess Islam, but avoid all inquiry into their doctrines. The Circassians and Abkhasians have never found a suitable home in Asia Minor, and are a serious disturbing element, being indolent and predatory. The Cherkess and Abkhasians of West Caucasus are Sunni Muhammadans; the Kabard are Christians; and these three races number 138,000.

Georgians have a tall, slender figure, a noble bearing, regular features, aquiline nose, finely-formed mouth, dark complexion, black eyes and hair.

Arbiches, a daring, brave tribe in the mountains on the E. coast of the Black Sea.

Abasia, a trans-Caucasian province, in the government of Immeretia, Russia. The Abases are of the Caucasian race, rude, and are predatory.

Khersuri, a half-savage predatory tribe near

the crest of the Caucasus. They are surrounded by the Ghondmakar, Kist, Boghasser, and Didyen.

Kistes, a brave pagan Caucasus tribe, a branch of the Lesghi, and bordering on the military road from Tiflis to Mozdok. They are governed by elected elders.

Kosakint, a powerful tribe of the Caucasus, of 10,000 families, who can bring above 4000 excellent cavalry into action.

Lazi, a brave race occupying the head of the great range of Taurus district of the province of (Trebizond) Tarabazun, to the east along the shores of the Black Sea, in the neighbourhood of Batoum. At the census they numbered 18,000 men. During the Russo-Turkish war of 1828-29, they brought 12,000 fighting men into the field.

Lesghi. The country of this race is about 12,000 square miles, the N. and S. slopes of the Caucasus. Narrow valleys and lofty mountains are occupied also by their tributaries, the Avar, Zerker, and others. Menteith says there are four tribes,—Kajar Kumak, 20,000 families; Kafir Kumak, 25,000; Avar, 32,000; and the Ak-Kuscha, 12,000. The Lesghi are the bravest but most turbulent of all the tribes of the Caucasus; most of them are Muhammadans. Nadir Shah lost 30,000 of his best soldiers in a campaign against the Lesghi, but they were totally defeated by the Russians in 1788. Their government is democratic.

Avar, a predatory tribe of the Lesghi, occupying the north slope of the Caucasus between the rivers Ahsai and Koisu. They are of Tartar descent.

Ossat, a tribe dwelling on both sides of the Caucasus, numbering 16,000 to 20,000 families, partly Christians and in part pagans. They belong to the Indo-Germanic race, with many customs similar to the Germans. They are of slender and light form, some with brown or red hair. They sit on chairs or benches, never cross-legged like orientals. They are cleanly, brew and drink beer, using horns, and drink healths. They show the grave of the prophet Elijah (Asiljalegat) in a grove near the village of Lamadan. They pay money for their wives. Until the married woman bear a child, she must, as with the Armenians, be silent. A widow who has borne children may be re-married to the father or brother of her deceased husband. There are nobles, freemen, and slaves. They adhere to the vendetta. They are short, 5 feet 4 inches, and thick-set, with haggard features, usually blue eyes, and red or light-brown hair. The women are seldom pretty.

Pehavi, a tribe of the Caucasus, living in fifteen villages, and numbering 3698 souls. They hold the mountains between Kakhketians and Chechens.

ARABIA.—The Arab has been a migrating, conquering race. The first emigration from Arabia is supposed to have taken place about 700 years before the time of Solomon. Arabia is described in the *Periplus* as a country filled with pilots, sailors, and merchants. In Pliny's time Arabs were the carriers of the Indian trade; their settlers have occupied the north and east of Africa, have filled the western shores of Ceylon, have established themselves on the coast of Malabar, and they are prominent in Sumatra in the Archipelago. In all parts of the south of Europe, W. Africa, W. and S. and E. Asia, are to be seen descendants

of Arab conquerors. They occupy Khuzistan and the whole of the Persian littoral, and also that of Persian and Baluch Mekran. Their armies have overrun the valley of the Lower Indus, have been dominant in Samarcand, Oudh, and Arcot, on the east have reached the Chinese territories, and on the west the Atlantic, Malta, Italy, and Spain.

The present Arabians, according to their own historians, are sprung from two stocks: Kahtan, the same with Joktan or Yoktan of the Bible, the son of Eber, whose descendants occupy the south; and Adnan, descended in a direct line from Ishmael, the son of Abraham and Hagar, who occupy the north. Yoktan, according to Ch. Bunsen, was one of the two sons of Nimrud, and was the chief of the first Arabian emigration that proceeded southwards. Tradition points to the mountains of Armenia as the birthplace of the Arab and Canaanitish races, and it is supposed that they travelled along the banks of the Tigris into Mesopotamia, from which a portion of them commenced a great migration southwards, the result of which was the foundation of the primeval kingdoms of S. Arabia, the kingdoms of the Adites in Yemen, who believe that they came from the sacred north, and once lived in a glorious garden of the earth, which they are to restore. In the matter of their present locations, Dr. Latham, in his *Ethnology*, considers that Hejaz is peopled by the descendants of Ishmael, but the inhabitants of Mecca and Jeddah consist of pilgrims and their descendants of African, Persian, and Turk blood. In S. Arabia, Yemen, Hadramaut, and Oman, the people are more or less Himyarite in blood, history, and civilisation. Those of the towns of Mocha, Sanai, Rodda, and Loheia are the more civilised, and the desert and hill Arabs are rude and ignorant, one of them so rude in speech as to be named the Bin-i-Kalb, children of dogs; and the Berekede, a branch of the Asir, are said to lend their wives. The Asir tribe occupy between Mecca and Medinah. They have six kabileh,—Bin-ul-Asmar, Bin-ul-Akmar, Charaan, Asir, Roufeida, and Ahida, and muster about 44,500 fighting men.

The people now occupying the Arabian peninsula are, however, regarded by Captain Burton as of three distinct races, viz. the aborigines of the country, who have been driven, like the Bhils and other autochthonic Indians, into the eastern and south-eastern wilds bordering upon the ocean; second, a Syrian or Mesopotamian stock, typified by Shem and Joktan, that drove the indigenæ from the choicest tracts of country; these invaders still enjoy their conquests, representing the great Arabian people. And, thirdly, an impure Egypto-Arab clan, well personified by Ishmael, his son Nebajoth, and Edom (Esau, the son of Isaac), that still populates the Sinitic peninsula. The indigenæ or autochthones, he says, are those sub-Caucasian tribes which may still be met with in the province of Mahrah, and generally along the coast between Muscat and Hadramaut. The Mahrah, the Jenabah, and the Gara especially show a low development. These are Arab-ul-Aribah, for whose inferiority oriental fable accounts as usual by thaumaturgy. Dr. Carter also has remarked on the similarity between the lowest type of Bedouin and the indigenæ of India, as represented by the Bhils and other jungle races. The principal immigrant race, he says, are the

Noachian, a great Chaldean or Mesopotamian clan, which entered Arabia about B.C. 2200, and by slow and gradual encroachments drove before them the ancient race, and seized the happier lands of the peninsula. This race would correspond with the Arab-el-Muta-Aribah or Arabicized Arabs of the eastern historians. The third family, an ancient and noble stock, dating from B.C. 1900, and typified in history by Ismael, still occupies the Sinaitic peninsula.

In Arabia there are several powerful nations, practically independent, though the emperor of Turkey claims to be their suzerain. But the great bulk of the population are in tribes, ruled by shaikhs or chiefs of their own election, chiefly pastoral and nomade, many of them predatory, with smaller tribes clinging around the larger for protection. Around Jerusalem are the Anazi, Shammar, Mowali, and Salhan.

The *Shamr* or Shammar is a great and powerful tribe of Bedouin Arabs who inhabit the N. part of the Al-Jazira province of the pashalik of Baghdad, and extend all over Mesopotamia. They pay no tribute, are greatly predatory, and have so thrown the beautiful lands of the Al-Jaziras out of cultivation, that it is literally a desert. They came from Nejd, about the beginning of the 19th century, under the leadership of Farez-ibn-Umr-ibn-Muhammad-ibn Abdul Aziz, and the country they occupy is now called Jazirat-ibn-Farez. They have ten divisions, which have 1000 tents. There are also ten Bedouin and Fellaheen tribes subject to them, mustering 13,500 tents, with 81,000 souls.

The *Shammar Jerbeh* tribe wander in Irak, all over N. Mesopotamia, from S. of Sinjar and the Khabur river to the Saklawiyeh canal, W. of Baghdad. They are the terror of the Turkish authorities and people.

The *Shammar Togha* tribe wander about the Diyaleh river, as far as Kut-ul-Amareh, and from the E. bank of the Tigris to Nahrwan. They have ten families, have about 200 matchlocks or guns, and 700 horsemen. Their war-cry is Sinaaish.

The *Daasur* families have 210 tents.

The *Daour* tribe number 300 guns and 300 horsemen, and, when at feud with the Shammar Togha, they cross to the W. of the Tigris, and settle near Shirsh and Shedayf.

In Mesopotamia are the following tribes:—

Abdeh, a Bedouin tribe in N. Mesopotamia, with 2000 families. They are under the Shammar.

Al bu Asi, a Fellaheen Arab tribe of 500 tents in the N. part of Mesopotamia, round Nisibin.

Near the Zab river are the Ash Shawan, Al Bakr, and Al Tai, with 700 tents. They are pastoral and predatory.

Amud, a Bedouin tribe of Arabs of about 700 tents, in the N. part of Mesopotamia, on the banks of the Jaghjagha river.

Khureseh, a Bedouin Arab tribe near Nisibin, in N. Mesopotamia, with 800 tents and 13,500 souls, tributary to the Shamr.

Thabet, a tribe of Bedouin Arabs who inhabit the N. portion of Mesopotamia. They have 1000 tents, and are subject to the Shamr.

Kikia, a Turkoman tribe in N. Mesopotamia, from Mardin to Veran Shahr, numbering 1000 tents. They are the descendants of the old Artokide kings.

Mika, a Turkoman tribe occupying the extreme N. part of Mesopotamia, from Mardin to Veran

Shahr. They number 600 families. They are subject to the Shamr Arab.

The *Baiat* or Al-Beyat, a Turkoman tribe of 300 tents, W. of Kifri, who can turn out 1000 horsemen. Nadir Shah swept away the bulk of the Baiat to Khorasan.

Al bu Sehnan, 200 tents, of Zab al Kalir and the Al bu Hamad of Eski Mosul, are pastoral and predatory.

Beni Zid, 100 tents, of Eski Kifri, are pastoral and agricultural.

The *Zobeid* is a great and powerful tribe in Mesopotamia, S. of the Saklawiyeh canal as far as the Ajaf marshes, partly nomade and predatory, partly settled and agricultural, on the E. and W. of the Euphrates, about the Hindiye. They have 1750 tents, and can muster 500 horse and 600 foot with fire-arms. Their war-cry is Jeheysh, and their chiefs are descended from Abdallah, of Himentæ descent, the Himentæ of Ptolemy.

Dhißfyr, a tribe of Bedouin Arabs, in the desert about the Montafik territory W. of the Euphrates. They are predatory, and cross the Tigris to levy contributions as far as Badrai and Mendali, and aid the Montafik.

Near the rivers Tigris, Euphrates, and Hye are the following tribes:—

Kojami, a savage, ferocious, wild tribe of 1000 families, W. of Urumia and Selmast, in the mountainous country at the source of the Tigris. They are Christians.

Tokabi, a wild tribe about the source of the Tigris. They are Christians.

Abbu Muhammad, an Arab tribe in the marshes N. of Kurnah and the banks of the Tigris, as far as the Hud stream. They rear buffaloes; are neither courteous nor brave.

Al bu Deraj, a tribe of 500 tents, wander between the Tigris and Euphrates, S.E. of the Hye.

Ashair Beni Laam tribe occupy both banks of the Tigris, from the Hye river to the Hud, and have about 4500 tents. They are proud, and do not marry their daughters into other tribes; when pressed by the Government, they migrate into Persian territory. They could, if united, bring 15,000 horsemen into the field.

Ashereh Kut al Amareh is a small Bedouin family on both banks of the Tigris, around the Hye stream. They have about 60 guns and a few flocks. They are chiefly guides, and are quiet and useful.

Al Deriya, Al Mayoof, and Al Mariyan are great pastoral families S.E. of the Hye. They do not cultivate.

Al Hamid Bedouins have 300 tents, and dwell in Irak, N. of the Hye.

Arfyd family dwell from Shumli to Hye in Irak. They have 400 tents. They are Bedouins, and can muster 300 horsemen with spears.

West of Baghdad, as far S. as Musserib, there wander several families, the Al-Abu-Aamer, the Beni Timim, the Az-Zoba, the Al-Tedagheh, and Al-Berghut, agricultural and pastoral, in all about 1200 tents; and to the N.W. of Baghdad are the pastoral Al-bu-Sagr, the agricultural Al-Meshahedeh, and the Aj-Jeburur (300 tents). Near the Dijel canal, N.W. of Baghdad, are the tribes Al-Khasrij (100 tents), Al-Majma, Al-Makadmeh, Beni Timim, Al-bu-Hujaza, and Aj-jeneyleh. They are pastoral and agricultural, and predatory.

In the *Baghdad* pashalik are the following tribes:—

Abeyd, an Arab tribe, N. of Baghdad. They comprise six families, with 1050 tents. They occupy the lands opposite the Dijel canal, around Samara and the Katuls, and extend from the E. bank of the Tigris to the Hamrin Hills. They are styled *Al bu Shahr*, or illustrious. They are predatory, have good horses and camels.

Adel, an Arab tribe dwelling in Baghdad city; another part of this tribe are in Nejd.

Al Bakr, an Arab tribe of about 200 tents, N. of the Zab river, in Baghdad pashalik.

Al Beyath, an Arab tribe of 300 tents, between Tuz, Kharmati, and Kifri, in Baghdad pashalik. They may be the *Al Beiyath*, an Arab nomade tribe of 130 tents and 130 matchlocks, who wander about Nahr Kathwaniyeh in the Baghdad pashalik.

Al bu Hamad, a predatory Arab tribe of 150 tents near Eski Mosul, province of Baghdad.

Al bu Sakr, a pastoral tribe of Arabs with about 300 tents and 300 matchlocks, N.W. of Baghdad, above the Saklawiyyeh canal.

Al bu Salman, an Arab tribe of 200 tents, partly agricultural, in part predatory. They dwell at Zahl Kabir in the Baghdad pashalik.

Aj Jebur, 300 tents, and the *Khasrej*, 100 tents, both cultivate in Dholiyyeh Hawis.

Al Kherkhiyeh, 300 tents, cultivate in Keshkul and Syedelan.

Al Kerwiyyeh, 300 tents, cultivate in Kara Teppeh.

Al Mashakedeh, a nomade tribe of Arabs to the N.W. of Baghdad, above the Saklawiyyeh canal.

Amareh, an Arab tribe in the pashalik of Baghdad. They have 27 divisions and about 2520 tents. In the early part of the 19th century this tribe was the most powerful in Irak-i-Arabi. They have about 500 matchlocks. Their war-cry is *Akhuyet Saadeh*.

An Naim, a tribe of Arabs of about 100 tents near Hamrin, in the pashalik of Baghdad. They profess great sanctity, and wander about as *Syuds* and *Darvesh*. They have camels and horses.

An Nedeh, a tribe of agricultural Arabs near Mend Ali, in Baghdad pashalik. They have 300 tents.

As Seraj, an Arab tribe in the pashalik of Baghdad in Mesopotamia. They have 1480 tents, wander over Mesopotamia, S.E. of the Hye, as far as the Hud river. They can muster 800 horse with spears, and 400 foot with fire-arms.

Azzoba, a tribe of Bedouin Arabs near Nuh Abu Gharib, W. of Baghdad. They number 300 tents; are partly pastoral, partly predatory.

Baij families are of Bedouin habits. They have 600 tents; they are good horsemen.

Beni Lam, a powerful tribe of Arabs in the S.E. portions of the province of Baghdad, with 68 clans. They occupy the frontiers of the Turkish and Persian empires, are continually engaged in plundering expeditions, are most treacherous, dishonest, and greatly feared. They are estimated to have 40,000 families. The *Montafik* Arabs have repeatedly defeated them. They can muster about 5000 horse and 10,000 infantry.

Beni Timim, two small Arab tribes in the Baghdad province, engaged in cultivation. They have 150 tents, and dwell between Sindiyyeh and the Atheim, and in Balad Ruz.

Dellim occupy both banks of the Euphrates,

from west of Baghdad northwards as far as the town of Hit. They have thirteen families and 1700 tents, and are warlike and agricultural. If united, they could muster 10,000 fighting men.

Khezail, a large Arab tribe in the Lamlun marshes near Baghdad; fierce and independent. They are stout, fair, and comely; their women very beautiful. They are the only Shiah tribe of Arabs.

Madan, an Arab tribe settled in small reed huts in the province of Baghdad. They have buffaloes, sheep, and goats. They are of uncouth and brutal habits, and thievish. They use scant apparel. Captain Jones says they have nine families, with 1900 tents and huts. They are strong in guns.

Majma, a collection of small Arab tribes on the left bank of the Tigris, in the province of Baghdad, partly pastoral, partly settled. They are very thievish.

Montafik, a powerful Arab tribe near the banks of the Euphrates from Korna to Samvat, in the province of Baghdad. The shaikh can bring into the field 4000 horse and 4000 foot. About A.D. 1744, they obtained the right of dominion over a small tract of country above and below Suk-u-Shaikh, paying tribute to the Sultan. But, on one of their shaikhs refusing to pay, a Mameluk officer attacked and destroyed them. They have since then again risen.

Anizeh and *Dhiffyr* are Bedouins. They generally locate themselves in the desert about the *Montafik* territory to the west of the Euphrates, and make occasional forays into Mesopotamia.

Sherabin, a tribe of Fellaheen Arabs who inhabit the neighbourhood of Nisibin, in the province of Baghdad. They number 600 tents, and pay a money tribute to the Shamr.

The *Mahrah*, a sea-coast tribe, dwell in the S.E. part of Arabia, from the opening of the great Wadi Masilah on the S.W., in long. 51° 13' E., and the town of Damkot, in the Bay of Al-Kamar, on the N.E., in long. 52° 47' E., with a coast-line of about 135 miles. Their country contains many Himyaritic inscriptions. They are descended from the ancient Himyari of Hadramaut. They have their divisions, subdivisions, or families, i.e. bait. They are of small, almost diminutive, stature, and are always at war with each other. They are not a handsome race; their features are short and irregular, eyes small, black, sunken, and piercing, with a cunning expression. They and the *Gara* touch each other's fingers in saluting, but instead of kissing them afterwards, as the *Gara* do, the *Mahrah* place each other's noses side by side, and audibly sniff in the air. Inland they live on milk and flesh, with dates and sorghum millet; on the coast, on fish and dates. They are said to have no religion. Their language is very soft, and they say of it, *Kalam d'Mhari misl Kalam-ul-tair*, 'The *Mahrah* tongue is like the singing of birds.' The *Mahrah* dialect, as spoken by the *Mahrah* themselves, is described by Dr. Carter as the softest and sweetest language that he had ever heard. A dialect of the *Mahrah*, called *Shehri*, is spoken by a tribe around Morbaat, and with this the language of the *Curia Muria* islanders is almost identical, and that of *Socotra* appears to resemble it.

The maritime part of Hadramaut is known as *Joor Shihir*. The *Mahrahs* to the westward are

said to be descended from the more ancient and original tribes of Gara, and both declare they are descended from the Himyari race.

The *Gara* or *Hakili* race, in the S.E. of Arabia, occupy exclusively the Salhan mountains, which extend from Marbat to Hasek. They claim descent from the Himyari. They border on the Mahrah race, but near them are remnants of the Afar tribe of the Hassarit, and the Barama, while in most of the towns in Dofar are the *Al-Kathiri*, who originally came from Hadramaut, and are at war with the Gara. The Kahtan family is the head of the Gara tribe.

At Hasek is the tomb of the prophet Hud, the fourth in descent from Shem.

The language of the Gara, called *Hakili*, or *Ekhili*, or *Ehkyly*, appears to be a purer or more archaic dialect than Mahrah. Dr. Carter says the Gara is the Bedawi dialect of the south-east of Arabia, and, like that spoken by the Socotrans and the Curia Muria islanders, is intensely guttural. They understand the Arabic of the towns only after much intercourse. It is spoken at Marbat and Zafar, and throughout the district of Shajr, by the *Hakili* (Gara of the Arabs), and *Barama* tribes, whose coast is from Damgut to Nus.

The Southern Arabians say that the Gara has a much less proportion of modern Arabic than the Mahrah. It is spoken along the S. coast of Arabia from Selut to Damgut, and extends far inland amongst the mountains.

Aden is British territory, but several tribes occupy the region around.

The *Abdali* or *Al-Abadil* occupy Lahej, which has an agricultural population, all Arabs. They have 66 sub-tribal divisions. The Jews are the goldsmiths, money-changers, and masons.

The *Khadmi* and *Iljiri* are of African descent, resembling the Suahili, and are menials.

The *Mouludi* are of mixed descent,—Arab fathers and African mothers,—and are more honourably employed. There are few slaves. The principal grain grown is the white and red varieties of the Sorghum vulgare.

The *Fadhli* or *Al-Fadhil* have about 100 miles of hilly sea-board. They have 24 sub-tribes, with about 6000 fighting men. They are proud, warlike, and independent, ready to take offence, treacherous and vindictive, grasping and avaricious, and lax in morals. The *Murakasha* sub-tribe hold a zanoo or base-born son in higher honour than a legitimate son. They claim descent from the ancient Himyarites.

The *Akrabi* tribe (*Al-Akarib*) have a small territory on the coast-line, inland to the desert. They have about 250 or 300 fighting men.

The *Howshabi* (*Al-Howshab*), with 10 subdivisions, dwell in a marshy, unhealthy tract. They cultivate sorghum and sesamum.

The *Alawi* tribe are united and powerful. They have about 700 fighting men. Their hilly district is N.W. of the Howshabi country, and little cultivated.

The *Amir* tribe dwell N.E. of the Alawi, on the high road to Sanna. The majority of the cultivators are Jews. Their fighting men are 2000.

The *Subaihi* (*us-Subaiha*) is a large sea-board tribe, from Ras Imram to Bab-ul-Mandeb. They are typical Bedouins; are 18 petty sub-tribes, few of which cultivate or trade, and only one has any fixed habitation; but live by plunder, which

they do unrestrainedly. They eat the sorghum; are spare of frame, but brave and enduring, though treacherous. They have not any horses, and but few camels, but these of a high breed, usually equal in speed to that of horses.

The *Yaffni* (*ul-Yaffa*) have more than 35,000 fighting men, in 15 sub-tribes; brave, but peaceably disposed. Their country is said to be mountainous in the interior. It begins at Khanfar, on the left bank of the Banna river, and has several towns. Many parts are well cultivated. They have several sub-tribes, one of them, the *Yeber*, of Himyarite descent. Their country is fertile, producing coffee, safflower, cotton, wheat, barley, and wax; the exports being from Shooagra to Hadramaut.

The *Aulaki* (*Al-Awalik*) country is on the sea-board between the Fadhli country and the Hadramaut. The population, 15,000 in number, are herdsmen and cultivators. Some of this tribe have taken service with the Nizam of Hyderabad.

The Arabian Sea, that part of the Indo-African Ocean on the south of Arabia, including the Red Sea and Persian Gulf, has 6000 miles of sea-coast. The southern tribes of the peninsula of Senai are more or less fishermen. The littoral Arabs of the Persian Gulf obtain almost all their means of livelihood from the pearl fisheries on the banks off the Arabian coast. The inhabitants of the Persian littoral are Arabs, more or less mixed, but in many places pure. The Persian rulers, however, regard all who reside below the raised table-land of Persia as aliens, and the Arab settlers on their coast retain the habits of their parent tribes.

Women.—The Arabs are not so scrupulous as the Turks and Persians about their women; and though they have the haram, or women's part of the tent, yet such as they are acquainted with come into it.

Customs.—It is necessary, when considering the Arabs, to distinguish between a series of grades towards civilisation, in which they are at present to be found. The Bedouin is wandering, pastoral, tent-loving, disdaining to trade, yet avaricious, and willing to sell his ghi, his mutton, or his horse, and always found in wide and open wastes, unpressed upon by adequate exterior power. Yet even the Bedouin bends to circumstances. He accepts the region allotted for his pasture grounds. Plunder has its laws, and vengeance its chivalry. If he will not trade, he has still wants, and he suffers the presence of a Jew or Saleebah as the Afghan suffers that of the Hindu. A little higher in the scale, as with the Cha'ab, is the original wandering pastoral Arab, in a district where he is pressed upon from without, and where boundless plunder and roaming are restrained by exterior force. The Arab then partly turns to agriculture, and for this he must in some degree settle. Society harmonizes to this level. Trade is possible. Corn is sold. The abba cloaks are woven and exported. Date trees are planted. Huts of reeds replace tents; and one sees in their feeble efforts at reed ornamentation, and in their rough twisting of their reed rope for their bunds, the possible germ of some architectural efforts. Yet higher in the scale is the Arab flourishing as an experienced and wealthy merchant in a town, or administering a well ordered and comfortable rural district. Passing among these

people, society is seen in its transitional state towards civilisation.

PIRATE COAST.—The littoral within the Persian Gulf between the mountain range and the sea-shore, and extending in that direction from Kasab to the island of Bahrein—a distance of 350 miles—bears the designation of the Pirate Coast. Ibn Haukal, in his version of the Koran, informs us that before the deliverance of the children of Israel from Egyptian bondage, the subjects of a pirate monarch in these parts seized on every valuable ship which passed. The possession of a few ports within and near the entrance of the Persian Gulf, where it is not more than thirty miles across, enabled them to perceive and sally out on all passing vessels. To the Portuguese, during their brief career in India, they proved quite as troublesome as they did in the latter part of the 18th century to the British. The imams of Maskat have been repeatedly at war with these tribes. In 1809, an expedition was sent against them under Captain Wainwright, in His Majesty's ship *Chiffonne*. Their principal stronghold, Ras-ul-Khaimah, was stormed and taken, and fifty of their largest vessels burnt or destroyed. Leit, on the island of Kishm, and several other ports, were reduced, but they soon returned to their old practices. The inhabitants of the Pirate Coast consider themselves to be far superior to either the Bedouin or town Arab. The latter, especially those from Oman, they hold in such contempt, that a Maskatti and an arrant coward are by them held to be nearly synonymous. They are taller, fairer, and in general more muscular, than either of the above classes, until they attain the age of thirty or forty years, when they acquire a similar patriarchal appearance.

The Arab Caliphs were eminently literary. The Arab invasion of Europe first dispelled the darkness which had spread over that continent. They brought with them the knowledge of the East, and in a measure, also, the then forgotten learning of Grecian antiquity. About the 8th century they gave to Europe their numerical figures, and the art of determining their rank in the decimal arrangement by their positional value.

The Arabic language, as written in the Koran, is the most developed and richest of the Semitic tongues. It is not now spoken in any part of Arabia, as there written. Probably it never was so, any more than the Latin, the English, the German, or Italian, have ever been spoken as written in their respective bounds; and Burton quotes from the Arabic Grammar of Clodius, that the dialectus Arabum vulgaris tantum differt ab erudita, quantum Isocrates dictio ab hodierna lingua Græca. Indeed, the Arabs themselves divide their spoken and even written language into two orders,—the Kalam Wati, or vulgar tongue, sometimes employed in epistolary correspondence; and the Nahwi, or grammatical and classical language. Every man of education uses the former, and can use the latter. And the Koran is no more a model of modern Arabic (as it is often assumed to be) than Paradise Lost is of English. The Koran has been translated from the Arabic into English, French, Persian, Urdu, Malay, Javan, Tamul. In Socotra, the language in use is undoubtedly derived from the Ghiz or Ethioptic. At present the Arabic alphabet is in use

amongst the Turks, Persians, Malays, some of the people of India and Africa. It was, however, of Syrian origin. The Arab family is Muhammadan, except the Christian Arabs of Malta. Nejd or Central Arabia is Syrian, and arranged into divisions called Suk.—*Lane's Koran; Peschel, Races of Man; Latham's Ethnology; Captain Felix Jones in Boy. Geogr. Soc. Trans.*, xii.; *Colonel MacGregor; Dr. Carter in Boy. As. Soc. Jour.*; *Pelly; Rawlinson; Wellsted's Travels; Burton's Mecca*, iii. p. 330; *Runsen's Egypt*, iii. and iv.; *Fontanier; Layard's Nineveh; Mignan's Trav.*

PERSIA.—The regions through which the Euphrates and Indus rivers run, and the countries intervening, have, since remote ages, been occupied by races who have taken a prominent place in Indian history. When Chengiz Khan in the early part of the 13th century overthrew Kharasm, and its ruler fled, only to die on an island in the Caspian, and his son, Jalal-u-Din, was defeated on the banks of the Indus, which he swam with seven followers (A.D. 1221) amidst a shower of arrows, but he conquered Sind and established his power in Persia, and was killed in Mesopotamia about A.D. 1233. After Shams-u-Din Altamsh had established himself firmly at Dehli (A.D. 1211, April 1236), he received investiture from the khalif of Baghdad, and at his court dwelt the author of the *Jama-ul-Hikayat*, a collection of historical anecdotes in Persian. The grandson of Altamsh, Nasir-u-Din Muhammad, reigned at Dehli from A.D. 1246 to 1266. He was an eminent patron of Persian literature, and the *Tabakat-i-Nasiri*, a general history of Persia and India, was written at his court. In A.D. 1544, the Dehli emperor Humayun, driven from India, was received in Persia by Shah Tamasp, who sent an army to restore Humayun, and it took Kandahar. After the accession of the house of Timur, notwithstanding the hostile feelings felt towards the Persians from religious prejudices, the court of Dehli long continued to have two parties, one using Turki, the other Persian; and although Aurangzeb treated the Persians (the original models of Indian Muhammadans) as rude and barbarous, and never mentions their names without adding a rhyming dislike, to the present day (1883) the Persian continues to be the court language of Indian rulers, and used by the learned in their literary and epistolary writings. Till the middle of the 17th century (1648), Kandahar was usually in the power of Persia; but early in the 18th century (1720-1722) Persia fell to the Ghilji. A few years later, Nadir Shah's victories in Herat (1731) led to his election as king. In 1738-39 he invaded India and sacked Dehli. During the first half of the 19th century, the British from India and the Persians have alternately been interchanging friendly embassies and been at war. British officers of rank and eminence have been lent to discipline the Persian army, and that army has been repulsed from Herat by Lieutenant Eldred Pottinger, and been defeated at Mahammerah by British Indian forces. The region intervening between the Euphrates and the Indus is thinly peopled. It is now occupied by races who are subjects of the king of Persia, the bulk of whom are nomade and of varied origin; also by the races known to Europe as Afghans; by the Brahui mountaineers, and the Baluch races of Baluchistan, and by races on the

sea-coast the period of whose arrival there is unknown, but who are largely Arab.

The Arab conquest (A.D. 632-38) permitted many of that race settling in Persia and to occupy prominent positions in it; but there are considerable numbers of maritime Arabs in its seaboard provinces, extending eastward as far as Sind, and who have probably been dwelling in their present localities long prior to the time of Mahomed. The people of Karak are Arabs, as also the Tangistani tribes S. of Bushahr near the sea; likewise the inhabitants of the Rohila district of the Fars province, who rear horses of mixed Persian and Arab breed, and export them to Bombay.

The population of Persia has been variously estimated. Sir John Malcolm estimated six millions, and latterly about five millions have been named. The people are partly settled in towns and partly pastoral nomades, and this joint occupation of the South-West Asian lands, from the Mediterranean and the Red Sea to the Indus, by fixed civic nations and nomadic tribes of herdsmen, sometimes of the same and sometimes of different races, is a standing ethnic phenomenon.

The nomade tribes are all predatory, and glory in their pursuits. They are brave and hospitable, but rude, turbulent, and grasping. They move with the seasons to summer and winter quarters. The men of Kasvin, Tabreez, Hamadan, Shiraz, and Yezd are as remarkable for their courage as those of Kumm, Kashan, and Isfahan are for their cowardice. From time immemorial, Persian or Pehlavi, Arab and Turkoman, have been contending for mastery. But the Persian inhabitants of towns, and those engaged in cultivation, are not warlike, and the contest has been between the Persian nomade and the Turkoman nomade, — the two great martial classes of the population. The Persian nomades all belong to the Pehlavi stock, though their dialects are different. They inhabit Kirman, nearly all Fars, a part of Irak, and the whole of Kurdistan, a region stretching through the ranges of highlands from near the entrance of the Persian Gulf in a N.W. direction, along the left bank of the Tigris as far as Armenia. The Turkoman nomades entered Persia with conquering armies; they had come from the banks of the Volga, from beyond the Oxus, and from the plains of Syria. Their habits are the same as the Persian nomades, but they speak a different language, and from the Arab conquest till the death of Nadir Shah, the rulers of Persia had either been Arab or Turkoman. No member of the Persian nomades had ascended the throne. It was this, probably, that gave rise to the bloody strife between the Zand and the Kajar. The Zand are the most illustrious of all the Persian tribes, and one of their chiefs, Karim Khan, after the death of Nadir Shah, succeeded in establishing himself in Isfahan and the Southern Provinces. The Kajar was a Turkish tribe brought by Timur from Syria, A.D. 1398, A.H. 803, and settled between Elburz and the Caspian, where they rapidly increased. After the death of Nadir Shah, a fierce war raged between Karim Khan, Zand, and Muhammad Hasan Khan, Kajar, which ended in Karim Khan's accession. The Kajar tribe is a Turkish Il, and from the accession of Fatah Ali Shah (obit 1834) they have been dominant. They have two sections, the Yokaribash and Ashagabash, each of which has six subdivisions or clans. The

Zindoglu were settled at Ganjah, in Russian Armenia, where they still remain. The Azdanlu clan were removed to Merv in the reign of Shah Tamasp I., and held it until conquered and nearly annihilated by the Uzbek under the khan of Bokhara.

Lak, a very large nomade tribe spread over Persia, though chiefly in Fars, Mazandaran, and Kasvin. They claim descent from the Kaiaian kings. The Zand, the tribe of Karim Khan, were Lak. They have 20,000 families, all of them predatory. The principal are the Beiranawand, Khojawand, Nadawand, Nakawand, Jalalawand, Abdul Maliki, and Sujah Vaksan. They are of the Ali Ilahi sect.

The Abdul Maliki reside partly near Shiraz and partly in Mazandaran, but chiefly around Sarmi Kala. They are said to be about 3000 or 4000 families. They have villages and cultivate, but are constantly on the move. They are professed thieves, living on plunder of passengers and small caravans, but seldom murder. They are liable to furnish 500 mounted fighting men for the Shah.

Iliyat is the general designation of the nomade tribes of Persia. They comprise a very large portion of the population of the country. Many of the best families are of Iliyat origin. The term is derived from the Turkish word *Il*, signifying a tribe, and the Arabic termination 'at.' All of them, Zand or Pehlavi, Arab or Turk, lead the same manner of life, their pastoral habits little distinguishing them from the Bedouin Arab or the nomade Tartar on the banks of the Tedzen. Each Iliyat tribe has its own history, and the principal nomade tribes are the Afshar, Aimak, Arab, Bajiban, Bakhtiari, Baluch, Bayat, Feili, Hazara, Kajar, Khuda Bandlu, Kurd, Kurd Bucheh, Lak, Mamaseni, Shah Seven, Shekagi. Some of them grow small quantities of grain, but their chief avocation is to breed camels, horses, cattle, mules, and asses.

They change their places of encampment with the season and climate, going in the summer to their Ailak, or quarters where pasturage and water are to be found in abundance; and when the cold of winter sets in, adjourning to their Kishlak or warmer region, in which their flocks and herds as well as themselves are better sheltered. Their summer abodes consist of large black tents, made of woven horse-hair, the sides being matting or dried rushes. They are usually pitched in a quadrangular form on the banks of their hereditary rivers, and under the brow of the mountains which have shadowed their forefathers for unknown generations. Hence, though they wander, it is yet within bounds. They have a country, and only change their place in it. The nomade tribes of Arabia and of Tartary bear the same character, possessing an extended inheritance, though it be only a desert. The Iliyat chiefs, to whom the tribes are entirely devoted, are the hereditary nobility of the kingdom of Persia. Those in the southern provinces, the Bakhtiari, Feili, and Mamaseni, trace their origin to the most remote antiquity, and are probably the descendants of the warlike bands who inhabited the same country in the days of Alexander. The Kashgoi are a nomade Turkish tribe of about 12,000 families, whose chief is the Il-khani of Fars. They and the Bakhtiari from the warm pastures of Arabistan and the head of the Persian Gulf arrive in spring

on the grazing of Isfahan. At the approach of winter, both the tribes return to their respective Garm-sair or wintering lands. The entire southern region of Fars, bordering on the Persian Gulf, is called the Garm-sair or hot region. It extends from the sea to the latitude of Kazerun, and runs parallel with the Persian Gulf, from the banks of the Tab to the confines of Luristan. From Bushahr eastward, as far as Kangoon, the tract is named the Dashtistan, or land of plains. The Tungistan, commonly pronounced Tungistun, or narrow land, is a small tract of land east of Bushahr. The greater portion of the people of the whole of that Garm-sair consists of an independent, lawless set, many of the tribes being robbers by profession.

The Garm-sair of *Sijistan* is a narrow tract along the lower course of the Helmand. The Baluch races seem to pronounce it Gurm-sehl or Garm-sail, and one of their wintering places is about 75 miles north-west of Nooshky. Each Iliyat tribe has a separate grazing ground for its flocks; and this land, from long and undisputed possession, is considered as the property of the different chiefs. In the fine season they are continually on the move in search of pasturage; but in the winter, several of the tribes, amongst which may be numbered the Karagooli and Afshar, settle in villages. In Dashtistan, Asterabad, and the northern parts of Khorasan, instead of tents they live in small portable wooden houses. They principally subsist on the produce of their flocks, and consequently grow but a very small proportion of corn. They manufacture cloth, as well as several other little articles for their own use; and the most beautiful Persian and Turkish carpets, so much admired in Europe, are the work of the Iliyat. Inured from their infancy to arms, to danger, and fatigue, and tenacious at the same time of the honour of their tribe, they are at once the prop and the glory of their country. Each tribe is divided into tira or branches, and each tira has a particular leader, all of whom are, however, subservient to the chief. These chiefs are, both from birth and influence, the first men in the empire; they are always mutually jealous and hostile; and the king, by nicely balancing the power of the one against that of the other, insures his own safety and the peace of his dominions. It was also the custom to detain at court, either the chief himself or some part of his family, as hostages for the fidelity of the tribe. Iliyat women are chaste and correct in their lives, and faithful to their husbands, and in their conduct and morals are vastly superior to those of the towns and settlements.

TURK TRIBES.—The *Afshar* tribe is one of the Kazzilbash, spread over Kirman, Fars, Luristan, and Khuzistan, in great numbers at Abiverd, and round the lake of Urumia. They are said to be of Turk origin, and to speak a Turki tongue. Their two sections are Shamlu and Karklu, and they number 20,000 families. They were one of the seven Turkish tribes to whom Shah Ismail owed much of his success, and whom he designated Kazzilbash. Abiverd was the birthplace of Nadir Shah, who was of this Karklu branch.

Layard says the *Gunduzlu*, a Turk tribe of Khuzistan, have 1500 fighting men. It is a branch or clan of the Afshar tribe. Nadir Shah found them occupying the plains of Khuzistan to the

foot of the great chain of mountains, and also in the country now held by the Cha'ab Arabs. They were sufficiently powerful to restrict the Bakhtiari to the mountains. Nadir Shah deported them to the north of Persia, but they returned to Khuzistan on his death. The Gunduzlu Turk in winter reside near Boleti, and in summer and autumn on the Ab-i-Gargar.

The *Baharlu* is one of the Kazzilbash Turkish tribes whom Shah Ismail brought from Syria. They have 2000 houses in Azarbijan. The other Kazzilbash tribes were the Ustajulu, Chamlu, Nikalu, and Zu-ul-Kadar, but whether any of them now remain is not known.

Chardaoria tribe from Luristan and the *Afshar* occupy Sain Kala in Azarbijan.

Kasvin is a town in Irak-i-Ajam, 97 miles from Teheran. Its inhabitants amount to about 25,000 souls. They are chiefly descendants of the Turk tribes who have long pastured their flocks and herds in the neighbourhood. They are hardy and robust, but rude and ungovernable.

Kara Papa is a Turk tribe of several hundred families, in the Solduz district of Azarbijan. They were settled in Georgia until A.D. 1826, and on war breaking out between Persia and Russia they moved into Solduz district, and Abbas Mirza gave them lands on military tenure. They found the occupants of the country chiefly Kurds, with a few Mokaddam Turk. They are prosperous. They have a high reputation for valour, and are skilful horsemen.

The *Khuzistan* province, in the extreme S.W. corner of Persia, has on its south the province of Fars and the Persian Gulf. Its population consists of nomade tribes, dwelling in tents, pastoral and agricultural. In its northern part are Feili, Bakhtiari, Kohgelu, and Mamaseni; in its south are the Arab tribes Anafjah, Ali Kathir, Cha'ab, and Beni Lam. The Dinaruni and their subdivisions dwell in Khuzistan. The Dinaruni are predatory, ignorant, and barbarous, and can muster 3000 men. They are overawed by the Bakhtiari.

The Feili, Bakhtiari, Kohgelu, and Mamaseni occupy also Luristan, where the Feili have two sections, the Pesh Koh and Pusht-i-Koh, cis-montane and trans-montane as regards the Zagros chain. The Pesh Koh are notoriously predatory, and single travellers and caravans cannot travel in safety. They are a branch of the Ali Ilahi Muhammadans, holding to many local superstitions. The Feili pretend to have more respect for an oath than the Bakhtiari, and to be less blood-thirsty, but there is little difference between them. The Silah Silah section of the Feili Lur are of similar bad character.

The *Bakhtiari* are a large, martial, valorous tribe, who occupy the mountains, and move to summer and winter quarters. They have a tradition that they came originally from Syria. The *Haft Lang* and *Char Lang* are their two sections, between which from time immemorial there has been the greatest enmity, and when they approach, blood is spilt. They can muster 6000 cavalry and 13,000 infantry. They have a national dance called *chapi*, and they have rejoicings over their dead, especially over those who fall in battle. Nadir Shah took a number of them into his army. The Janeki are the chief branch of the *Char Lang*. The Bakhtiari have been supposed to have given the name to Bactria.

The *Binduni* are a small tribe dwelling amongst the Bakhtiari.

The *Maluk-Madi* tribe of Bakhtiari accompanied Nadir Shah against Herat.

The *Alaki*, a branch of the Haft Lang, make their summer quarters in the mountains near Teheran, and in winter go to the sea-coast near Bushahr.

The *Kohgelu* inhabit the mountains at the source of the Jarahi river, between lat. 50° and 51°. They adjoin the Bakhtiari, and are the same in language, manners, customs, character, and religion, but they consider themselves different; they are under the Behbahan governor, whilst the Bakhtiari are under that of Shiraz. They have about 20 clans, with 15,500 families.

ARAB TRIBES.—The *Cha'ab Arabs* are a tall, martial race, strong-limbed and muscular, active and healthy. They occupy the lower part of Mesopotamia, the southern portion of the plain of Khuzistan, in Persia, with the Hindiyan river on the east and the Karun river on the west, extending along the banks from Ahwaz till its junction with the Shat-ul-Arab. Their divisions are the Ali Bu Nasir, the Idris, Nasara, Mohaisen, Bawi, Beni Jemim, and Haidari Haidar, with about 50 subdivisions. Their adults are stated at 68,000, but about 10,000 are supposed to be fighting men. They are agricultural, and have irrigating canals. They protect trade. They are Shiah Muhammadans. They are tributary to Persia.

Albu Ali is a tribe of the Cha'ab Arabs, residing in Khuzistan. They number 2500 adult males.

Abu Ghesh, a tribe of the Cha'ab Arabs, residing at Buziah, in the province of Khuzistan. They have 6000 adult men.

Ali Bakard is an Arab tribe settled in the plain of Ram Hormuz, in Khuzistan. They have good matchlockmen, and a few expert horsemen.

Ali Kathir, a large Arab tribe in the Dizful district of Khuzistan. They have 19 branches, of about 14,000 to 15,000 families, and can furnish a good body of cavalry.

Ali Khamis, a nomade tribe of Arabs, a branch of the Maedan, inhabiting the plain of Ram Hormuz, in Khuzistan.

Al Kuniferah, a clan of the Cha'ab, are located on the road from Mohamra to Dorak, in Khuzistan.

Al Mukadam, a tribe of Cha'ab Arabs, near Dorak, in Khuzistan.

The Amur clan wander about in the southern parts of Khuzistan. They number 10,000 adult males.

Anafijah, a nomade clan of the Maedan Khuzistan tribe of Arabs, are a powerful tribe under the authority of a shaikh, who retains 300 horse and 400 foot. They occupy in Khuzistan the right bank of the Karun below Band-i-Kir. They possess large flocks of camels and sheep.

The Asar Kirah clan reside near Oushar, near Buziah, in the Falahiyah district of Khuzistan.

The Bawi are a large and powerful tribe of Arabs, who can turn out about 1000 horsemen and about 2000 footmen. They inhabit both banks of the river Karun, and are tributary to the Cha'ab shaikh, though its chief considers himself more under the protection than under the absolute authority of the shaikh of the Cha'ab Arabs, against whom they frequently appear in arms. They are notoriously treacherous.

Dinaruni, a predatory, barbarous, and ignorant tribe of the mountains of Khuzistan. They can muster 3000 men. They are overawed by the Bakhtiari. The Ali Mahamdi in Khuzistan is one of the largest subdivisions of the Dinaruni.

The Sadat and Sadir and Saki tribes dwell near Hawizah in Khuzistan, and numbers of the Saki are in Luristan.

The Sharifat tribe has about 10,000 families. They occupy the vicinity of the right bank of the Hindiyan river in Khuzistan and the Zaitun Hills. This tribe has 2000 foot and 700 horse, and has frequently opposed the Cha'ab shaikh.

Teheran, the capital of Persia, is built in the very lowest part of an immense desert plain. It has 100,000 inhabitants. Colonel Shiel gave the following tribes of the neighbourhood and district of Teheran.

Turk, viz. Shah Seven, 9000 tents; nomade in Kum, Teheran, Kasvin, and Zanjan.

Kharekanlu, Bajmanlu, Kundeshlu, Khellij, Khoda Baudeshlu, 400 houses in Teheran city.

Afahari, 900 houses and tents, between Teheran and Kasvin.

Usanlu, 1000 tents at Demavand, Kehleku, and Gavbaz, 150 houses.

Abul Hasani, Jahan Beglu, and Shadlu, 320 tents and houses.

Tuyuj, a base tribe, dwelling in 300 tents near Teheran. They are very poor, are thieves and fortune-tellers.

Turk and *Lek*, viz. Turk-i-Mafi, 100 houses; Pazeki, 2000 tents and houses; Kengerlu, Kara Churlu.

Lek, viz. Nine tribes near Kasvin, 1500 tents; Hedawand, Burbur, and Sylsipur, 1000 tents and houses.

Zargar, thieves and coiners.

Khurd Bacheh, 400 tents.

Shah Sarwari, 250 tents, and Nana Kelli, 650 tents, S. of Teheran.

Kurdistan lies between lat. 34° to 39° 30' N., and long. 40° 48' E.; 500 miles long, and 150 miles broad; but near Van its breadth is about 300 miles. The Kurds inhabit the whole of both sides of the main range, which, running out south from Mount Ararat, divides Asiatic Turkey from Persia from Bayazid to near Hamadan. The limits comprise portions of the provinces of Bayazid, Arzrum, Mush, Van, Diarbahr, Musal, and Turkish Kurdistan in Asiatic Turkey, and of Ardelan or Persian Kurdistan, Azarbijan, and Kirmanshah in Persia. It is a succession of steep and rugged mountains, with fertile but narrow strips of valleys at their base. The mountain system consists of the great southern spur of Mount Ararat, which divides the drainage of the Tigris from that of Persia, and from which several spurs project. The western part of Kurdistan gives rise to the Batman Su, Bitlis Chai, Dials, Khabur, Sert Chai, Tigris, Yezdikhaneh Su, Zab greater and lesser, and Lake Van is in Kurdistan. The people are greatly nomade, with large flocks of sheep and goats. Their horses are good, and 60,000 to 80,000 could be annually supplied.

A. Pizhder district.—The Sekkir and Nur-ud-Dini have 100 villages and 1000 fighting men; Shinki, 200 families; Ghellali, 150 families; Siwell, an agricultural tribe.

B. Nomade.—Jaf and its tributaries could

furnish 1000 infantry and 300 horses. The Jaf protect all the tribes of Luristan and Persian Kurdistan, increasing their strength to several thousands. There are fragments of about seventeen tributary tribes, comprising nearly 3000 families, formerly part of the Balbassi, Lak, and Feili. Amongst these are the Zend, to which belonged Karim Khan, king of Persia, whom the Kajar overthrew.

In N. Kurdistan, the four great tribes are the Bahdinin, Bohtan, Hakari, and Rowandez, the Hakari having 27,840 souls.

The Kurd are the Carduchai of the Greeks. They are partly nomade, partly settled. They are brave, hospitable, robust, hardy, and temperate; are long-lived, but uncivilised, averse to settled habits, delighting in war and rapine, and hardly regarding murder and parricide as crimes. They are seldom taught to read or write, but are carefully taught to manage horses and arms. The wali of Ardelan and wali of Sulimania are their greatest chiefs, he of Ardelan claiming to be the lineal descendant of Salah-ud-Din; is tributary to Persia. The features of the Kurd are sharp; face oval, nose prominent, mouth and chin receding; brow ample, eyes deep set, dark; mouth well formed, and teeth fine. Kurd or Kerad seems to mean speech. The people call their country Karmanj. They are invariably mounted; are armed with bows and javelins. Their tents are black.

The Kurd in Asia Minor are thievish, predatory, revengeful, untruthful, and irreligious. The working and industrious portion of the population in N. Kurdistan are Armenian and Nestorian Christians, all serfs, known as Zar Kharidi, gold purchased, and they are bought and sold as predial slaves with the land.

Sulimania is the capital of Turkish Kurdistan.

Bebbeh, a Kurd clan, now dominant in Sulimania, and formerly very powerful. They claim descent from a European princess who married their ancestor Fabih Ahmad.

The Mendimi number 300 families. They are under the Pasha of Sulimania.

Millia, a Kurd tribe, inhabit the Abdul Aziz range in the Sulimania district of Asiatic Turkey.

The Kurd are widely spread. They are found in Kurdistan, on the east of Persia, also in the west of Persia, in Asia Minor, and in Syria; they also possess Merv, they are numerous in Khorasan, are also met with in Baluchistan, on the Dasht-i-be-Daulat, and in Takari (Tirkari), in Cutch Gandava, two miles N. of Cutchi; they say they can muster 500 fighting men. A few of the Kurd are on the Russian territory, some are well within the Turkish, others within the Persian frontier. The nucleus of the Kurd family, however, lies south of Armenia, along the mountain ridge which separates Asiatic Turkey from Persia. They have many tribes, a few agricultural, but most of them pastoral and nomade. They are hardy, brave, and rapacious. The Mikri Kurd occupy the south of Azarbijan. They are agricultural; they are brave horsemen, and on one occasion, in the early part of the 19th century, drove the whole Russian cavalry off the field.

The Bilba tribe, in Lahijan in Azarbijan, are nomade, roaming about the borders of Persia and Turkey. They are the most predatory, turbulent, and treacherous of all the border tribes of Kurd-

istan, and have been ruthlessly hunted down by other tribes. They number about 5000 families, in three divisions,—Piran, Mengur, and Marnish.

Mikri, Hakari, Afshar, and Zerza are found in the Urumia district of Azarbijan.

The Kurd in Persian Khorasan were brought from Kurdistan by Shah Ismail, and settled on the eastern frontier of Persia, to check the inroads of the Turkomans. There were 4000 families, who have since increased to 50,000, and they are formidable, both on account of their numbers and their valour. They continue predatory, and retain much of the Kurd language, though adopting the Persian dress.

The Amberlu Kurd, who occupy the Zetunabad district in Azarbijan, were settled there by Nadir Shah.

Urumia in Azarbijan, on the borders of Kurdistan, has 20,000 to 30,000 inhabitants of the Mikri, Hakari, Afshar, and Zerza. The plain is highly productive, but the people are poor and oppressed.

South of Urumia is the town of Ushnai, in lat. 36° 55' 29", at the foot of the great Kurdistan mountains of Turkish Kurdistan. The inhabitants are Kurds of the tribe of Zerza, formerly 4000, but now only 800 houses, the plague having carried off numbers of them.

The Mengur, a division of the Balbas Kurd, are nomades who pasture their flocks in summer upon the Persian frontier, between Sardasht and Ushnae, and in winter retire far within the Turkish line.

The Bera-Dust, a celebrated tribe, inhabit the district of Kamreah, west of lake Urumia, in the Persian province of Azarbijan. They formerly gave chiefs to Sumai and Terkur.

Baban, a tribe of Kurds between lake Urumia and Kerkuh.

The Kurds of Guran of Kirmanshah are frank and hospitable, of the Ali Ilahi religion, mixed with doctrines of Judaism, Christianity, and Shiah Muhammadanism. They are supposed to be of Hebrew origin. Major Rawlinson raised a regiment amongst them. The Sharaf Bayene tribe, between Zohab and Sulimani, are supposed to be Guran Kurd.

The Baho and Dastiani districts of Persian Makran are occupied by the Jagdal, Hot, Latti, Raisi, Kosagi, and Shahzadah.

Adian, a tribe of Kurds claiming descent from Shaikh Adi, the Kurd saint. They dwell on the banks of the Boltan.

Ali Arus, a nomade tribe of Arabs dependent on Hawizeh district of Kurdistan.

Bahdinin, a Kurd tribe in the valley of Amadia and left bank of the Tigris. The chiefs of Amadia claim descent from the Abbassi khalifs, and assume a saintly character. Some of the chiefs have imitated the latter khalifs by covering their face with a veil, so that no one may see their face.

Bulbassi is a Kurd tribe composed of the following sections:—1. The Kabaiz, the reigning family; 2. Manzoor; 3. Mamash; 4. Piran; 5. Rummook; 6. Sinn; and 7. Taafah. The chiefs of tribes are called Muzzin. The Bulbassi will not bestow a girl in marriage on a person of another tribe or people. They have courtship among them, and carrying off a girl by the lover is common. When a chief dies, he is succeeded by the best or bravest of his family, with the common consent of his tribe. If his eldest son be incapable, the best of the brothers succeeds. In

their own country the Bulbassi do not willingly acknowledge any superior, either Turkish or Persian; but when they descend into the regions of Karatchuk, they pay a tribute of sheep to the Bey. Most of the principal people among them possess a complete suit of mail. They sew a wounded man in the skin of a bullock fresh stripped off the animal, leaving only his head out; and they leave him in it till the skin begins to putrefy. They say this never fails to cure the most desperate spear or sabre wound.

Baliki, a large Kurd tribe of 10,000 families, occupying a strong secluded country which forms the prolongation of the Ushnai mountains. They claim descent from Sharezer or Sanaser, son of Sennacherib. They mix up a belief in Moses, Christ, Mahomed, and Ali.

Kelowski or white caps, called also Guran, are scattered all over Kurdistan. They are deemed ignoble.

Khazanli, a Kurd tribe in the Kharzandagh mountains, formerly predatory.

Khoshnav, a Kurd tribe in the north part of the country. They have three branches. Their language partakes of the Bebbah and Bahdinan dialects. Khoshnav and Rowanduz Kurd are brutally savage. They rigidly follow their prayer times, but do not scruple to kill their enemy, even in their mosque.

Luristan, a province of Persia, of 19,500 square miles, extending for 270 miles westward from the borders of Fars to those of Kirmanshah. It has a population of 56,000, composed of the Feili. It is divided into Luristan Buzurg and Luristan Kuchak (greater and lesser). The former is the mountainous country of the Bakhtiari, stretching from the frontiers of Fars to the river Dizful; and Luristan Kuchak is situated between the river and the plains of Assyria. From the 12th to the 17th century, Luristan Kuchak was ruled by a race of independent princes who were styled Atabeg, the last of whom, Shah Verdi Khan, was displaced by Shah Abbas the Great, and the country, with the title of Wali, granted to Husain Khan, a rival chief. The Feili clan is that of Husain Khan. When the whole of the Luristan Kuchak was under the dominion of a wali, all the tribes were designated Feili, but it is now applied only to those of the Pasht-i-Koh behind the great Zagros chain. Major Rawlinson gives Luristan Kuchak to six tribes and twenty-seven clans. The women perform all the labour. Their religion is an offshoot of that of the Ali Ilahi sect, with many local superstitions. The Lur do not revere Mahomed or the Koran. They worship Baba Buzurg, and regard several holy men amongst them with little short of adoration. And many of their observances are traceable to a time long prior to Mahomed. Macdonald Kinneir had noticed their midnight orgies of Chiragh Kushan, which are probably not now continued, but they were common till the beginning of the 19th century, and are supposed to have been a remnant of the physiological worship of Anaitis and Mithra, from the time that Sesostrius erected the emblems of the worship, and Semiramis followed them in practice.

Mahmaseni, properly Muhammad Huseni, one of the most turbulent and lawless tribes of Persia, are settled to the north of Kazeran, in the province of Fars. They claim descent from Rustam. They

have six clans,—Rustami, Gavi, Zali, Bekesh, Dushman, Ziari, and Zqi. Their families have been estimated at from 400 to 12,000. They dispossessed the former inhabitants of Fehlian from all the arable land. Regular troops were sent against them after the death of Fatah Ali Shah, on which they threw themselves and children over a precipice and destroyed themselves.

The Rustami of Sarab-i-Silah and Digar, in the plain of Bairam in Fars, are esteemed the bravest of the tribe. They can bring 200 well-mounted and well-armed horsemen into the field.

Laristan, a province of Persia, in lat. 26° 30' to 28° 35' N., and long. 52° 30' to 55° 30' E., extending along the north shore of the Persian Gulf, and is 210 miles long and 120 miles broad. The coast is in the possession of different Arab tribes, all predatory. The interior has an aboriginal race who speak a dialect of the Pehlavi.

Azərbayjan province is in the extreme N.W. corner of Persia. Colonel Shiel gave the numbers of their tents at 65,000, as under:—

TURK.		LEK.	
Shah Sevand, . . .	15,000	Shekaki,	15,000
Khagehalilu, . . .	800	Zergar,	400
Beg dillu,	200	Kulbeglu, Mishkamber, 400	
Sheklu,	150	Kara choorlu, . . .	2,500
		Chelebeanlu, . . .	1,500
TAT AND TURK.		KURD.	
Mukadam,	5,000	Mikri,	15,000
Mahmudlu,	2,500	Baban,	1,500
Beharlu,	2,000	TAT AND LEK.	
Afshar,	7,000	Almadavad, . . .	200
Kara papak,	1,500	Dumbeli,	2,000

The Azərbayjan people have an aptitude for war, and could supply 60,000 men, viz. 20,000 cavalry, 3000 artillery, regular infantry 12,000, irregular infantry 25,000.

The Chardaori tribe from Luristan and the Afshar, occupy Sain Kala in Azərbayjan. Tabreez, its chief town, has a population estimated from 80,000 to 140,000. It has been repeatedly taken and sacked by the Turks, Persians, and Russians.

Shahgagi is a large but rough and lawless tribe of about 50,000 families, in Azərbayjan, in the districts of Hasht-Rud, Garm-Rud, Miana, and Ardebil. They use Turkish and Leki. They make excellent soldiers, and British officers in 1833 formed three battalions from them.

Shah Sevand are nomade Ilyats in Irak and Azərbayjan. They form a very large tribe of 15,000 families; they do not cultivate, but are wealthy from their herds of cattle and flocks of sheep. They are predatory. Their winter quarters are at Mishkin, and they occupy Ardebil and Khemseh.

Fars, a province of Southern Persia, is bounded on the N. by Irak, E. by Kirman and Luristan, W. by Khuzistan, and S. by the Persian Gulf. It lies between lat. 27° 20' and 31° 41' N., and long. 49° 20' and 54° 20' E., with an area of 44,395 geographical square miles. Its plains are in general fertile. It has the seaports of Tauri, Kongun, Reshahr, Bushahr, Bandar Reg, and Bandar Dilan. It is sparsely peopled. Its tribes are Persians—Lek, 9000 houses; Turk, 40,000; and Arabs, 10,000.

Kash Kayi is a collection of tribes in the province of Fars, whose ancestors are said to have been deported from Kashgar by Hulaku. They have thirty divisions, with about 15,000 families. They have sheep, goats, horses, horned cattle, and asses, and they make up wool into carpets and

clothing. Some of their sheep are of remarkable size, weighing 130 lbs. to 144 lbs.

Behbahan is a town in the province of Fars, 128 miles W.N.W. from Shiraz. It is on a fertile plain watered by the Kurdistan river. The tribes are nomades, and, with the numbers of their tents, are as under:—

Bawi,	1,200	Sher Ali,	1000	be-
Kohmari,	800	Shehrui,	tween	Ram
Boverr,	2,000	Malnh medei,	Hormuz	
Charm,	1,000		& Shustu.	
Nui,	1,000	Aghajiri,		
Dashman Zaril,	500	Jaghutai,		1,000
Yusuñ,	400	Keshitil,		
Tyahi,	1,000	Tileh Kohi,		
Bahmahi,	2,000	Bilehlu,		1,000
Nafar,	850	Jama Buzurgi,		
Behariu,	1,230			

The Nafar are Turk, and roam through Fars.

The Behmehi or Bahmahi are a wild and ferocious clan, and frequently at feud with the governor of Behbahan.

Ghilan, a province of Persia, extends between lat. 36° 30' and 37° 45' N., and long. 48° 30' to 50° 45' E., with an area of 4673 square miles. It is bounded on the N. by the Caspian Sea, on the E. by Mazandaran, and on the S. and W. by Azarbijan. The parts near the Caspian are low, unhealthy, jungle-clad plains; the climate is so highly insalubrious, that the Persians have a proverb, If tired of life, go to Ghilan. The population is about 100,000, ignorant and bigoted. The women are extremely handsome and beautiful, and the children are particularly so. There are many gipsies; they are called Kaola, literally black. The silkworm is largely bred.

Talish district is N. of Ghilan, with the Caspian on the E. and the Masula mountains on the W. It is fertile, but unhealthy, and the inhabitants take up summer quarters in the mountains. The men are spare and robust, but not tall; they are brave, but highly predatory and savage. They are devoted to their chiefs; their weapons are the matchlock and Ghilani knife.

Isfahan, in lat. 32° 39' 34" N., and long. 51° 44' 37" E., is on the left bank of the Zainderud river, in the midst of a plain 75 miles long from E. to W., and 20 miles broad from N. to S. The streets are narrow, dirty, and mean. Its population may be about 200,000. They are industrious, and manufactures in wool and silk are largely produced.

Dabasi are beggars of Isfahan, whose members travel all over the country. They pretend to be afflicted with ailments.

Khorasan, a mountainous province with long narrow valleys, extending between lat. 33° 30' to 38° 30' N., and long. 53° to 60° E. Its N. fertile districts are occupied by the Kurd, and its other divisions are Turshaz, Tabas-Ghayn, Khaf, Mashad, Nishapur, and Shahrud or Damgan. Shah Abbas is said to have settled the Kurds in the N. district, and to have brought Arabs into the S. part. The central and W. portions have Persians and Aimak, and Hazara occupy the east. To the N.W., and on the frontiers of Asterabad, and towards the Caspian, are Turkomans of the Goklan tribe; to the N. and N.E. are the Kurd of Khabushan and Daragaz; in Turbat, Shaikh Jam, and Khaf, are the Taemuri Aimak; in Turbat Haidari are the Karae and various tribes of Baluch and Lek; while Tushez, Ghayn, Tun, and Tabas are occupied by Arabs. The language generally spoken is

Persian. The N.W., N., and N.E. districts are fertile and well watered, and produce metals abundantly; woollen articles are manufactured, and fruits are largely exported.

A branch of the Taemuri of Afghanistan inhabit the district of Khaf in Persia.

Hazara, to the E. of the Taemuri of Khaf, are a small but turbulent tribe, of thievish habits, who kidnap surrounding races and sell them to the Turkoman. They possess three small towns.

Ibn Sharban, Arab tribe of 30,000 families, occupy Tabas, a town of Khorasan. They were brought here by a king of the Suffavi dynasty. They breed camels and sheep. They maintained independence for centuries.

Aimak, numbering 50,000 families, occupy the southernmost parts of Khorasan province, near Kara-Khaf and Bakhey. They are of the same race as the Aimak of Afghanistan, and are all nomade. They are Sunni Muhammadans. The Sakli live in the district of Ghayn in the province of Khorasan. Nishapur district of Khorasan, to the W. of Mashad, is celebrated for its turquoise mines, which are 40 miles W. of Nishapur town.

Karai or Garai is a brave tribe with 5000 tents. The Baluch (2000) and Lek (1000) occupy the town and district of Turbat Haidari in Khorasan.

Kirman, a province of Persia, bounded on the E. by a part of Seistan and Baluchistan, W. by Fars, S. by parts of Luristan, Makran, and the Persian Gulf, and N. by Khorasan. It is about 365 miles long and 280 miles broad. It is very mountainous. The desert region of Kirman is about 270 miles long, from lat. 29° 30' to 34° N., from the city of Yazd, in long. 55° 40' E., to a range of mountains separating it from Seistan in long. 60° E. The whole tract is without water, and is so saline that for 80 or 90 miles at a stretch it does not produce even grass. The Afghan army, on its march to invade Persia in 1719, suffered the most dreadful hardships in this waste, one-third of their number perished, and the remainder reached Nurman-shahr with the loss of all their equipage and baggage. There is a path through it from Kirman to Herat, by which couriers can go in 18 days, but the risk of perishing is so great that in 1810 a person asked Rs. 200 to take a letter from Lieutenant Pottinger to Captain Christie. The tribes and their population consist of Afshar, Turk Karae, and Ali Ilahi, Lek, Seistani, and Baluch,—in all about 5000 or 6000 families.

The town of Kirman has 30,000 souls, among them a few Parsee or Gabr. Its shawls, numdabs, and matchlocks are famed all over Asia. The wool of the sheep is of high quality. When cut off the sheep, it is repeatedly and carefully scoured and picked, after which it is immersed in a wash. Its shawls and carpets are next to those in Kashmir.

Kirman town is in the direct route between Khorasan, Balkh, Bokhara, Mawar-un-Nahr, and all the N. of Persia. It has been taken by the Khalifs Chengiz Khan, Timur, the Afghans, Nadir Shah, and so late as 1794 it was betrayed into the hands of Aga Muhammad Khan, the founder of the Kajar dynasty.

Kirmanshah, a district of Persia, lying between lat. 34° to 35° N., and long. 44°-5° to 48° E., with the mountains of Persian Kurdistan on its N.,

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those of Turkish Kurdistan on its W., E. by Irak-i-Ajam, and S. by Luristan. It is a highly productive region. The Kurds supply sheep to Teheran and Turkey; its fine horses have much Arab blood, and its carpets are celebrated. Its tribes are:—

LEK. Families.	Families.
Guran, 3,500	Zuleh, 250
Kalhur, 11,500	Nanu Killi, 700
Zanganah, 10,500	Ahmadawand, }
Surjahea, 2,000	Pyrawand, }
(branch of the Zanganah.)	Bahtui, }
Jalalawand, 300	Filehgiri, }
Balawand, }	Sufehwand, }
Panjinawand, }	Vermezgar, }
Zohinawand, 1,000	Kuziawand, 1,500
Kakawand, 2,000	
Hersini, 400	TURK.
Jalilawand, 600	Khuda-bandalu, 200

Kirmanshah, the chief town, is in lat. 34° 18' 45" N., and long. 46° 37' E., and 250 miles S.S.W. from Teheran.

The Kalhur is a large and powerful tribe, in the district of Harunabad. They number from 7000 to 11,500 families. The men are tall, well made, and good marksmen. The women are handsome. They are of the Ali Ilahi sect, and they worship at the shrine of Baba Yadgar in the pass of Zardah.

The Sinjani tribe in the plain of Mahi-dasht number 4000 tents, and have considerable stock of camels, horses, oxen, mules, and asses. They are very lax Muhammadans.

Mazandaran, province of Persia, lies between S. shores of the Caspian Sea and the Elburz range of mountains, about 2000 miles long and 60 miles broad, from lat. 55° 45' to 57° N., and long. 50° 15' to 54° E. The climate is very unhealthy. They are the most warlike of the Persians; the men are brave and expert in the use of arms. They are required to furnish to Government about 12,000 infantry. The wandering tribes, estimated at 50,000 souls, have settled, and provide 5000 cavalry. The tribes named by Colonel Shiel and Mr. Holmes are Lek, Kurd, Turk, Afghau, Baluch.

Abdul Malaki.	Imamlu.	Khojevand.
Afghan.	Imranlu.	Modanlu.
Afshar.	Jan beglu.	Talish.
Baluch.	Kajar.	Usanlu.
Gerailu.	Kelidgeli.	

Modanlu is the largest tribe, and contributes 1000 horse; the Khojevand and the Abdul Malaki are the next in importance.

Gondar, a small tribe of 500 souls, who inhabit the wild country near Ashraf in Mazandaran; good marksmen with the bow and matchlock. They are said to eat the flesh of the wild hog, and place no restriction on the intercourse of the sexes.

Firoz Koh, a village of 300 houses in Irak-i-Ajam in Persia, 90 miles N. of Teheran. It is built on the bank of a stream, towered over by perpendicular rocks 1000 feet high. The houses rise on the mountain side, but others of the people dwell in caves on the mountain side.

The religion of the bulk of the inhabitants of Persia is Muhammadanism of the Shiah sect. But Persia has always been fertile in sects. The earliest known to modern Europe was promulgated from the Alamut, a solitary, bare, and steep rock, 32 miles from Kasvin, which Hasan Sabah, chief of the Assassins, made his fortress. He was the Shaikh-ul-Jabal which the crusaders translated Old Man of the Mountain.

The Ali Ilahi believe in the incarnation of Ali

and his descendants. They have long taken a place among the sects of Persia. They extend eastwards into Bombay, but are now chiefly found among the genuine Persian tribes of Lak descent; also among the Guran Kurd, and around the higher parts of Zagros. They are said to practise rites which they conceal from the uninitiated. A similar rule of retaining secrecy to their customs is attributed to a sect called Adami, whose meetings at night, in caves, are said to be conducted with rites like those of the Mylitta of the Assyrians, of the Alitta of the Arabs, and of the Persian Mithra; but such are the usual form of accusations made in Asia by opposing sectarians. The same is said of the Lur.

The Majusi or Gaor Yezdi are said to worship the cow.

The Sufi doctrines current in Persia are various forms of philosophy. Many of the most learned and best read of the community are Sufi sectarians, amongst whom there are both atheists, theists, and pantheists. The Kaimur and Mitani are Sufi sects of freethinkers, who deny everything they cannot prove. The Dheri sect of the Sufi believe the world to be uncreated and indissoluble.

The Babi sectarians were followers of Syud Ali Muhammad, who, after repeated imprisonings, was at last shot at Tabreez. His doctrines were atheistic, under the guise of pantheism, but many of the religious men, mulla and mushtahid, joined him. He gave to himself and his doctrines the title of Bab (door, porte), to imply that his doctrine was the gate of heaven. Persia has many religious mendicants, darvesh or fakir, some of whom designate their sects by the names of holy men; some of them permit marriage, others are celibates. The Adhumian or Ajunian sect take their name from Sultan Adhum, who resigned his throne to become a mendicant; they do not marry, are wanderers, and are seen constantly moving their lips in silent prayer.

The Christian sects in Persia are of the Armenian and of the Nestorian Churches. The Nestorians claim to be Kaldani; they inhabit the district of Urumia in Azarbijan, and the mountains to the south. They live amongst Kurd; and their patriarch has dwelt at Kojamis near Julamerk, in the heart of the Kurd mountains. Their number in Persia, Turkey, and Kurdistan is about 200,000,—wild, brave, and grasping. About the year 1870 they were attacked by the Kurds, and numbers massacred. There are throughout Persia, as in Afghanistan, Turkish Arabia, Turkey, and the west coast of India, small bodies of Jews, who are occupied in petty traffic and as distillers.

Fire-worshippers, followers of the doctrines of Zertusht (Zoroaster), are still to be found in different parts of Persia. Yezd is a town of 30,000 souls, of whom 1000 are Jews and 4000 fire-worshippers, there designated Gabr (Gaour), but styled Parsee in British India, after their original home. The merchants of Yezd visit Bombay, the Mauritius, Java, and China.

Hindus are met with in many parts of Persia, engaged in financial and mercantile transactions. The town of Turshes, 36 miles N.E. of Turbat Haidari, is occupied by Hindus from Multan and Jeysulmir.

Karbala, in Turkish Arabia, and in Persia, Mashad, and Kum, are sacred towns. Kum is in Irak-i-Ajam, 80 miles from Teheran. The sister

of Imam Raza is buried there, and the town is the most celebrated of the sanctuaries (Bast) of Persia. In Mashad, the capital of Khorasan, the Imam Raza was interred; his shrine is a sanctuary even for murderers, and the people from very great distances send the bodies of their dead relatives to be interred near the saint's tomb. Formerly the whole mahalah, or quarter of Bidad, was reckoned sacred, like the Kedesh of Galilee, and the Shechem of Samaria and Hebron in Judea. The town of Ardebil (lat. 38° 14' N., and long. 48° 21' E.) has the tombs of Shaikh Safi-ud-Din, and of his descendant Shah Ismail, the founder of the Saffavi dynasty, and on their account it is a place of pilgrimage.—*Porter's Travels*, i. p. 475; *Kinneir's Geographical Memoir*; *Malcolm's History of Persia*; *Pottinger's Travels*; *Beluchistan and Sinde*; *Rich, Residence in Kurdistan*; *Chesney's Euphrates and Tigris*; *Fontanier*; *Taylor*; *Layard*; *Burnes*; *Conolly*; *Ferrier*; *Baron de Bode, Travels*; *Cornel MacGregor, Central Asia*, iv., quoting *Abbot, Chardin, Clerk, Eastwicke, Fraser, Grant, Holmes, Monteith, Morier, Ogilvy, Ousley, Pelly, Pasley, Rawlinson, Stewart, Stanton, Shiel, Todd, Wagner, Wilson*.

CENTRAL ASIA, as here to be noticed, is known to the natives of Persia as Turan. Its western boundary may be taken as the Caspian Sea and the Ural; on the east is the lofty table-land of the Holor mountains, which form the western boundary of Chinese Turkestan and Zungaria; on the S. and S.E. are Persia, Kashmir, Kafiristan, and Afghanistan; and its northern boundary is western Siberia. The northern half of Central Asia consists of the Kirghiz desert, which is mountainous and rugged on the east, and full of saline steppes on the west. In the midst of the southern half lies the Sea of Ural, on the western side of which up to the Caspian Sea there stretches a broad tract of desert. But on the eastern side of Central Asia is the fertile tract watered by the Syr Darya and Amu Darya,—the Jaxartes and the Oxus,—and which was conquered by Russia in 1864 and 1868.

The countries north of the Hindu Kush, which lie in the valley of the Oxus and its tributary rivers, from Balkh upwards, have several designations. Eastwards of that city lies Kunduz, and Badakhshan is farther eastward. To the north of this territory are the hill states of Wakkan, Shughnan, Darwaz, Kulab, and Hissar, whose rulers claim a descent from Alexander the Great. To the eastwards of Badakhshan lies the plain of Pamir, inhabited by the Kirghiz, and beyond the Belur Tagh mountains are Chitral, Gilgit, and Iskardo, which extend towards Kashmir. South of Badakhshan is the country of the Siah Posh Kafir, who occupy part of the range of Hindu Kush and a portion of Belur Tagh.

Central Asia has a hardy peasantry, dwelling in the mountain region with its vast upland downs, well suited for summer pasture, partly descendants of the original inhabitants, and in part nomade races. At the foot of the mountains, in the tracts of surpassing fertility, Turk, Bokhariot, Kalmuk, Kirghiz, Uigur, Manchu, Chinese, and Iranian dwell in the well-watered plains.

The regions from the Polar Sea to the Hindu Kush, and from the interior of China to the shores of the Danube, have been occupied by nomade races from pre-historic times, along with

descendants of Semitic and Iranian conquerors from the south. The more ancient occupants of Central Asia belong to the Iranian family. The later immigrants are from Mongoloid races. From amongst these came the warrior nations known in the west as the Hun, the Avar, the Uigur, the Kutrigur, and Khazar. And the manner of living, the customs, and physical conditions of the tribes, whose arms reached from the Jaxartes to the heart of Rome and Gaul, had much resemblance to those of the present inhabitants of Central Asia, nomades, who are in their habits the same as they were 2000 years ago. In the tent of many a nomade chief a similar life is observable as that described by Priscus as prevailing at the court of the king of the Huns. Attila, Chengiz Khan, and Timur, in historical characters resemble each other; and Vamberg was of opinion that energy and good fortune could now almost produce on the banks of the Oxus and Jaxartes one of those warriors, whose soldiers, like an avalanche carrying everything before it, would increase to hundreds of thousands, and would appear as a new example of God's scourge, if the powerful barriers of European civilisation, which has a great influence in the east, did not stop the way.

Considerable portions of the region are occupied by the Turk race. These are usually recognised to be in ten tribes.—Uigur, Uzbek, Usmanli, Yakut, Turkoman, Nogaian, Basian, Kalmuk, Kara-Kalpak, and Kirghiz.

The Uigur occupy part of the region known to Europe as Chinese Tartary, and the Uzbek are their western neighbours under the Chinese. They at present occupy Kashgar. They are called Hiung-nu by the Chinese, and in Europe are known as the Hunigur, Hongre, or Hun. About B.C. 200 they dispossessed the Yu-chi, but were in turn subjugated by the Chinese before the Christian era.

Uigur, according to Professor A. Vamberg, are the most ancient of the Turkish tribes, and formerly inhabited a part of Chinese Tartary, which is now occupied by a mixed population of Turk, Mongol, and Kalmuk. They were the first who reduced the Turkish language to writing, borrowing the old Syriac characters from Nestorian Christians, who had come to their country as early as the 4th century of the Christian era. The manuscripts of this language, written in the characters mentioned, afford, therefore, the most ancient and valuable data in investigating the history not only of Central Asia, but of the whole Turkish race. He believes he had collected all that has been discovered of the Uigur language, though the Uigur had a literature, and were very fond of books, at a time when the western world was involved in ignorance and barbarism. The most valuable manuscript he obtained bears date 1069, and was written in Kashgar; it treats of ethics and political subjects, and forms a kind of manual of advice to kings how to govern with justice and success. It reveals the social condition of this people, and forms the basis of the later regulations by which all Turks are governed. The Uigur writing character was the original source of those still used by the Mongol and Manchu. The modern Tartar characters are written (and, it is presumed, read) in vertical lines from top to bottom of the page, the lines

succeeding each other from left to right. What Uigur meant with Mongol authors is doubtful, but the people and language so called by the western Asiatics were Turki. Captain Valikhannoff speaks of the language now in use at Kashgar as being Uigur, but it is not clear whether he means that this term is known to the natives.

Uzbek are now dominant in Khiva, and are spread through the Bokhara khanate. Their early history is obscure, but prior to Chengiz Khan's time all Mawar-u-Nahr was occupied by a Turk race, with whom the modern Uzbek claim identity, and many names of their tribes, as Kungrad, Naiman, Kipchak, Jalair, etc., are identical with those of the Kirghiz, Kara Kalpak, and Turkoman. Their prominence in the khanate of Bokhara dates from the times of Chengiz Khan, whose grandson Shaibani, brother of Batu Khan of Kipchak, son of Jogi (eldest son of Chengiz), ruled over a number of Turk and Mongol tribes occupying the country between the river Ural and Sea of Ural, and also the regions watered by the river Jaik, which flows into the Caspian. With these he founded the khanate of Tura; and one of his descendants, Uzbek Khan, was so beloved, that his people gave his name to the nation. One of his descendants, a powerful ruler named Abul Khair Khan, advanced towards the S.E., under whom the Uzbaks were composed of a number of Turki and Mongol tribes to whom others joined, attracted by their prestige. Their genealogical list, Nasal-namah-i-Uzbekia, enumerates 97 tribes, one-third of whom are settled in the khanate, viz. Aimak, Arabet, Chagatai, Chiljuyut, Buzachi, Byagrin, Byatash, Jid, Juyut, Galiachi, Guriyat, Durmen, Khatia, Kir, Kirkit, Karlik, Kipchak, Kalmuk, Katagann, Kanchin, Kungrad, Kunigaz or Kani-gaz, Kureme, Lakaye or Lokhai, Manghit, Naiman, Sarai, Tatar, Turkomans, Uigur, Ung, Ungachit, Uzoj, Yabu, Yuikhun.

The Manghit is the chief and dominant tribe, some of them being settled in towns, others nomade near Karshi and Bokhara. The settled portions cultivate by means of their Persian slaves. Intercourse for ages with Persian women, and of other Turki tribes who have joined them, attracted by their prestige, has largely modified their physical appearance. Burnes, Abbott, Elphinstone, Fraser, Vambéry, Khanikoff, Collett, and others have noticed them variously; but they may be described as haughty and overbearing in demeanour towards all the other races of the khanates, averse to labour, rather given to acts of violence, but brave, simple, manly, straightforward, and comparatively honest. The simpler though ruder Uzbek of Khiva is the better.

Urganj, or Yengi Urganj, the modern Urganj, formerly the capital of Khiva, is a flourishing commercial but walled city on the banks of the Oxus, about 18 miles N. of Khiva. The inhabitants are chiefly Tajak. Old Urganj, the ancient capital of Kharazm, is in ruins.

Usmanli are descended from a pastoral band of Oghuz Turk, who were migrating under the leadership of Ertoghrlul. The tribe, A.D. 1224, had left Khorasan, and rested for a time in Armenia, and, during their progress westward, Ertoghrlul aided successfully a small army of Ala-ud-Din, the Seljuk sultan of Iconium. They

take their present tribal name from Ertoghrlul's son Usman, and their numbers are about 11 or 12 millions, scattered over the whole Turkish empire in Europe, Asia, and Africa. They form the landed proprietors, the aristocracy and bureaucracy of Turkey; and their language, the Usmanli, is spoken by all persons of rank and consideration, and by all government authorities in Europe, Syria, Egypt, Tunis, and Tripoli. In the southern provinces of Asiatic Russia it is the language of the people along the borders of the Caspian, and through the whole of Turkestan. It is heard even at the court of Teheran.

The Turkoman group of tribes has been known from the early ages as a distinct branch of the Turkish race. They were first known historically as having come from the neighbourhood of Mangishlak on the Caspian, but they have traditions which assert that they lived originally far to the east, and travelled thence in a N.W. direction; and isolated groups are indeed found located on the supposed line of route, in the district of Jizikh, north of Karmina and Samarcand, which, although living for ages apart from the rest of the race, still retain all the characteristic features of the race. Soon after the death of Timur, the tribes overran and occupied Persia, and Azun Hasan, chief of the Turkomans of the White Sheep, overthrew and killed in battle Abu Said Mirza, the most powerful of Timur's descendants. The last chief of this dynasty, Murad Beg, was driven out of Baghdad, A.H. 908, by Ismail Shah of Persia, and was finally defeated and slain by the Persians, A.H. 920, A.D. 1514.

At present the various tribes, entirely nomade, have no political connection with each other, nor any common head, and the power and importance of the race has greatly fallen. But the Mameluk of Egypt were of Turkoman origin; and the Turki races in the N. and W. of Persia and adjoining districts are of this stock. For a long time past they have been employed as mercenaries by Khiva and Bokhara, and they will serve any master who will pay them well. Nadir is said to have had the whole race in his pay; and Aga Muhammad Khan, the founder of the Kajar dynasty, is said to have employed them.

They extend from the Caspian eastwards to Balkh, in the south of the Amu (Oxus), and from that river southward as far as Herat and Asterabad, a tract almost all desert, excepting the districts watered by the Atrak, Amu, Gorgan, and Murghab, where they cultivate the soil.

They are chiefly nomade (charwar), but partly settled (chumur). The latter cultivate, have large flocks and herds, and keep fowls, but have few camels; the nomades have numerous camels, sheep, and goats. Both classes rear horses. The Turkomans have nine tribes,—Ali-ali, Arsari, Chandora, Goklen, Kara, Salor, Sarika, Tekke, and Yomut,—each of them with several taifa or tira, clans or branches. The Russians estimate their numbers at 600,000, in an area of 21,000 square miles.

The Ali-ali, about And-khui, have 3000 tents = 15,000 souls. The Arsari are on the banks of the Amu, about Charjui and Lab-i-Ab, and northwards as far as Kirkinjuk and Karakul. In the end of the 18th century they arrived from Mangashlak. Those on the Amu produce silk, the finest in the khanate. They have 20 clans,

and have 50,000 to 60,000 tents = 250,000 or 300,000 souls.

The Chandor, seven or eight clans, have about 12,000 tents. They frequent the country lying between the S. shores of the Caspian and the Lower Amu.

The Goklen are agricultural, settled, and the most peaceable and civilised of the Turkoman; dwell in the rich country about Garjan; most of them are Persian subjects. They have ten clans, and about 10,000 tents.

The Kara, a small but very savage tribe, at war with all their neighbours, are found about And-khui, and near wells between And-khui and Merv.

The Salor have been famous for their martial qualities ever since the Arab invasion. The Constantinople dynasty is said to belong to them. At present they have three clans, with 8000 tents. The Sarakhs near Merv are said to be of this tribe. They are rich in cattle, and cultivate. They and the Sarihs early left Mangishlak. The Sarakhs are equally brave; they are occupying about Panjik, on the Murghab, but are at war with most of the other tribes. They have about 10,000 tents, in five clans.

The Tekke have their principal stations at Akbal and Merv. They are the most numerous and powerful tribe. They have less than the other tribes of cultivable land within their borders, and are more dependent on plunder. Their incursions are much dreaded in the N.E. of Persia, as well as in the direction of Herat. Their principal taifas are the Bakshi, Otemisch, and Totamish, with numerous subdivisions, and they are said to number 60,000 tents = 300,000 souls. In 1881 they submitted to Russia.

The Yomut are said to have 31,000 families, of which 16,000 are subject to Khiva, and 15,000 to Persia. They themselves allege that their tents are 40,000 to 50,000. They are settled on the eastern shores of the Caspian and on some of its islands, also in the Khiva desert near the Oxus. They have four clans; one, the Ogrjali, are under Persia, and are peaceable traders.

The purest type of the Turkomans is found amongst the Chandor and Tekke in the remoter deserts, are of middle height, small head, oblong skull, a rather long chin, and snub nose; cheek-bones not high; eyes remarkably bright, sparkling, and fiery; feet usually turned inwards; and usually fair in colour. The women are unveiled, have a ruddy, healthy look, and often considerable beauty. They are chaste, devoted to their families, and do all the hard work, the men confining their work to the care of their horses. The women make beautiful carpets; a long shift is their usual dress, to which they add a shawl and boots, with many silver trinkets, chains, amulets, etc.

The chief expeditions of the Tekke were to seize slaves in Herat, Khorasan, Seistan, W. Afghanistan, and Persia, whom they sold in Bokhara and Central Asia; while the Yomut infested the southern shores of the Caspian. The Ali-ali and Kara captured caravans on their way to Bokhara. The Chandor ill-treat their slaves, so as to be a scandal to the neighbouring races. The slaves are mostly Persians of the Shiah faith; but they take the Sunni from Khaf and Herat, also capture Jamshidi and Hazara, occasionally an Afghan and a Hindu. The slave trade is regularly organized.

The Kara Kalpak is an industrious tribe of Bokhara and Khiva. They inhabit the delta of the Oxus, to which they migrated from the delta of the Syr-i-Darya in the beginning of the 19th century, in consequence of continual fights with the Kirghiz. They are supposed to be the race whom the Russians call Tchernie Kobluki. Their traditions are to the effect that about the 15th century they occupied the territory about Kazan, which they built. Afterwards Tartars came there. Subsequently, the city was taken by the Russians, on which the Kara Kalpaks left, and the Tartars remained. The Kara Kalpaks then led a nomadic life for 130 years, but afterwards settled for about 30 years in Turkestan. About A.D. 1690, a war occurred, on which they again left Turkestan, and settled, part of them on the Lower Syr-i-Darya (Jaxartes) and Yani Darya, others on the right bank of the Zar-afshan, and 60,000 kibitkas on the Upper Oxus. Small numbers dwell on the right bank of the Zar-afshan, not far from Samarcand.

In appearance and dress they are intermediate between the Kirghiz, Kazak, and Kalmuk. They are tall, vigorous men, with more powerful frames than any of the Central Asian tribes, but clumsy, and with coarse features. They have large head, flat full face, large eyes, flat nose, slightly projecting cheek-bones, a coarse and slightly-pointed chin. Trotter says they have 10,000 to 15,000 tents in the Khiva districts; their tents are large and strong, and guarded by a breed of large dogs.

Kirghiz proper are called Burut by the Chinese, Kara Kirghiz by other Asiatics, and by the Russians, Diko-ka-mennyi (i.e. wild mountain people). They must not be confounded with the people called by the Russians Kirghiz or Kirghiz Kazak, a distinct nation, differing from the Kirghiz proper in appearance, in language, and in many of their habits and customs. Their name and origin are said by them to be derived from Kirk-kiz, forty maidens, the male ancestor being a red dog. Vambery, however, says the name is from Kir, a field, and Giz, root of the verb Guzmak, to wander. They call themselves simply Kirghiz. Their principal quarters are in the mountains around Lake Issyk-kul, and in the valley of the Chu; this valley and the Ala-tagh or Kirghiz-tagh mountains being their boundary to the north, from whence they wander into Chinese territory on the one hand, or into Khokand and Samarcand on the other, while to the south they range over the Pamir, Karatagin, and as far as Badakhshan and the eastern parts of the khanate of Bokhara. They are divided into two great sections, the On (right) or eastern Kirghiz, and the Sol (left) or western, both from a grandson of Kirghiz Beg. The tribes of the On are the Sary Bagnish, Bogu, Saltu, Cherik, Sayak, Adygve, Monandyr, Jadygyr, and Tungstar; those of the Sol are the Kokche, Soru, Mundu, and Kitai. They are ruled by their elders, styled Manap. Their chief wealth consists in cattle, sheep, and camels. They intermarry with the Kirghiz Kazak. They profess Muhammadanism, but retain some of the customs of the fire-worship. Few can read, and their women have much freedom, are unveiled, and there is a curious absence of jealousy. They trade in felts and pelts, skins of the martin and fox, and deer horn. Love of travel and war have often brought together the most distant branches; but whether

on the shores of the Emba, or of the Sea of Ural, whether in the environs of the Balkash and Alatan, there is little difference to be found in the dialects spoken by them.

The Kirghiz between the Ural and Lake Balkash, including the Buriat, are, of all Turks, most nearly allied to the Mongols. The great Kirghiz steppe is the eastern portion of a belt of low-lying country which stretches from Europe into Asia, along the frontier of southern Siberia, and is divided by the upheaved chain of the Ural mountains, which run in a north and south line. The Kirghiz hordes occupy the low plain which, commencing from the north-eastern shores of the Caspian, and continuing along the Eruba steppe, passes across the country north of Lake Ural, directly to the eastern end of the Balkash. They also inhabit the banks of the middle and lower courses of the Syr-i-Darya (Jaxartes), as well as the Kizel Koom (red sand) deserts, which are localities taken possession of by them in more recent times.

Tungus are widely distributed; there are Tungus in China and on the Frozen Ocean. Manchu, who conquered China in A.D. 1644, and founded a dynasty, belonged to the Tungus. The Teha-jir occupy between the Yenisei and Tunguska. Mongol and Tungus are few in number, and many of the tribes are dying out. Since the 8th century, the Chinese have known the Mongol as the Mung-ku, but they applied to them the nickname of Tata. This is the origin of the term Tartar, Tatar, or Tahtah, a designation used at the present day as vaguely as Scythia was by the Greeks. By a dialectal change in the Persian language, Mongol becomes Moghul, a term applied to emperors of India, successors of Baber, though Baber was not a Mongol, but a Turk, who wrote and spoke Jaghtai Turki.

The Hazara spoke the language of the Mongol so late as the time of the Baber. The two hordes of the eastern Mongol inhabit the eastern half of Gobi. The Mongols sometimes bury their dead; often they leave them exposed in their coffins, or cover them with stones, paying regard to the sign under which the deceased was born, his age, the day and hour of his death, which determine the mode in which he is to be interred. For this purpose they consult some books, which are explained to them by the Lamas. Sometimes they burn the corpse, or leave it exposed to the birds and wild beasts. Children who die suddenly are left by their parents on the road.

Kalmuk call themselves Olot, 'the peculiar people.' They have four hordes,—the Zungar, the Turget, the Khoshod, and the Turbet. They also call themselves Durban-Oirad, the four allies. The meaning of the term Kalmuk is uncertain. The Turget tribe of the Kalmuk, feeling oppressed by the continually increasing power of the Zungar, emigrated to Russia in A.D. 1636, and were granted pasture on both banks of the Lower Volga by the Czar Michael Feodorovitch. After the destruction of the Zungar power by the Chinese in 1756, in the reign of the Emperor Tsian Lung, the remnants of the Kalmuks rejoined their compatriots in Russia; but on the 5th January 1770, the great portion of the tribe, 150,000 souls of them, in 30,000 kibitkas, set out from the Lower Volga to return to China. They were beset on their route by the Kirghiz Kazak, by the Cossacks

of the Ural, and by the Burut or Black Kirghiz, and by other Turk tribes; but 70,000 of the emigrants eventually reached their ancient pastures,—about half the number of those who started from the Lower Volga.

At the present day, from 80,000 to 100,000 Kalmuk, following the Buddhist religion, are found in the Government of Astracan.

The Kalmuk in Bokhara are descendants of followers of Chengiz Khan, and of stragglers left by the Turget Kalmuk in 1771, in their migration from the Volga to Eastern Turkestan. The latter speak their own language.

Kazak. — The territory occupied by this race extends from the Caspian to the rivers Ural, Tobal, and Irtysh, and the Altai mountains on one side, and to the Tian Shan and Hindu Kush and the Amu on the other. Their numbers are computed at 400,000 families, or between 2 to 2½ millions of souls, viz. the Great Horde, 75,000 families; Middle Horde, 165,000; and Little Horde, 160,000. At present the Middle Horde is more in contact with Russia, and is the most civilised, and three divisions roam within Russian territory. They have Mongol features, with black hair; are strong, healthy, and well made; slow, heavy, and ill-favoured. They are morose, vindictive, and revengeful; passionate, but not brave, greedy and avaricious; but are attached to their country, are grateful for kindness, and respect the aged.

Kazaks are chiefly nomades, with great flocks of sheep. They speak a corrupt form of Turkish.

Kazaks roam over the desert steppes that lie between Siberia, China, Turkestan, and the Caspian Sea. Russia, China, Khokand, Bokhara, and Khiva levy tribute on portions of this race; but they are true nomades, and cannot be said to be subjects of any particular power. They subsist on the milk and flesh of their flocks and herds. At the commencement of winter, when forage fails, the Kazak kills the old horses, camels, etc., and salts their flesh for winter food. They are Sunni Muhammadans.

In manner of life and language the Kazak is hardly to be distinguished from the Burut. In colour, the Kazak women and young men have white, almost a European complexion, which darkens by exposure. The Kazak have the short neck of the Turanian race, so different from the long-necked Iranians; and they have thick-set, powerful frames, with large bones; head not very large, crown round, and more pointed than flat; eyes less almond-shaped, but awry and sparkling; prominent cheek-bones, pug noses, a broad flat forehead, and a larger chin than the Burut; beard on chin thin, only hairs on both ends of upper lip. They deem a Kalmuk woman more beautiful than their own. The men in summer wear the Kalpak head-dress, and in winter the Tumak cap of fur, covered with cloth and flaps. They are almost all Muhammadans, but, like all nomadic tribes, are lax in their observances, for they retain much of the Shamanist belief which they held prior to their conversion some centuries before. Chiromancy, astrology, casting out devils, are common to all Muhammadans, but the Kazak draw omens from the burnt sacrifice of the shoulder-blade and the twisting of the entrails.

Iranians. — From the Vendidad opening chapters there seems in ancient times to have been a great kingdom in Central Asia,—an eastern branch, with

its primeval seats on the Oxus. The Iranian people, who were settled between the Oxus and the Jaxartes as early as the times of the Judges of Israel, still, however, hold their ground in the country, under the names of Tat, Tajak, Sart, Galsha, and Parsivan. A primitive and not impure Iranian population might still be found in almost every district, from the Indus to the Jaxartes, and throughout the valleys of the Oxus. And Persian, Kurd, Armenian, Osset, and Tajak are dwelling in the countries to the W. and N.W. of India.

Iranian races have always been known for their refinement and high civilisation, from which Europe borrowed through the Byzantine and Greek culture, and the Persians have long and faithfully retained the features of its national characteristics. Though overrun by the Semitic and Turanian races, the Iranian has borrowed little or nothing from them, but has exerted over them powerful influence. According to Khanikoff (*Sur l'Ethnographie de la Perse*), the Iranian of Persia came from the east of modern Persia, about Segestan and Khorasan, and moved to the west in pre-historic ages; and, though altered by the attacks of the Turk tribes from the north, or from contact on the west and south with Turanian and Semitic elements, the Mede is everywhere recognisable as the same as described by Herodotus and later Greek writers. The arrow-headed writing at Persepolis enumerates the Iranian people of that day. The form of the Iranian is spare but elegant, even noble, but there have always been differences between the Eastern and Western Iranians.

The East Iranians are—(a) the Segestani or Khafi, (b) Char Aimak, (c) Tajak and Sart; each of which counts many subdivisions. The principal number of the Segestan people occupy Khaf and its neighbourhood, Ruy, Tebbes, and Birjan.

The people of Khorasan are greatly intermixed with Turk elements. The language of modern Iran is laden with Arabic and Turkish words; but in the east the language is much like that in which Fardusi wrote his poem, free from words of Arabic origin.

The Char Aimak consist of four peoples, the Taemuri, Taemuni, Firoz Kohi, and Jamshidi, all of them of Iranian origin, and all speaking Persian. The Aimak, who graze their flocks in the Paropamisus, are brave and relentless; and Afghans, when travelling, whether proceeding from Balkh, Kābul, Kandahar, or Herat, never enter into the mountain districts of these intrepid nomadic tribes.

The Taemuri dwell at Gorian and Kuh'sun, on the western boundary of Herat, and in the villages and towns situated east of Iran, from Tarbat Shaikh Jam as far as Khaf. About a thousand of their families dwell near Herat.

The Taemuni dwell in the Jolgha-i-Herat, from Kerrukh to Sabzawar, the few who have extended to Farrah being styled by the Afghans, Parsivan. Each member of the Char Aimak knows no greater enemy than the Afghan, and all attempts to form Afghan colonies amongst them have failed. The Taemuni are of a wild, warlike nature, though agricultural.

The Firoz Kohi, a small number of people, about 8000, dwell on the steep hill N.E. of Kala Nao, and from their inaccessible position afflict their whole neighbourhood with their robbing and plundering. Kala Nao, on the summit of the mountain, and the fortified places of Darz-i-Cutch and Chaksaran, are

considered similar to whole nests of the Bakh-tiari and Luri in the environs of Isfahan. They have a resemblance to the Hazara, but their forehead, chin, complexion, and figure are less Turanian. They are decidedly Iranian. They take their name, the Firoz Kohi, from Teheran. Timur settled them by force in Mazandaran, but they soon returned to their own country. They have a few cattle, and they sow a little, and plunder the caravans travelling on the Maimani road, or make inroads on the scattered tents of the Jamshidi.

Jamshidi are the only tribe of eastern Iranians who are exclusively nomades. They derive their descent from Jamshid, and moved out of Segestan to the shores of the Murghab, which they have occupied from pre-historic times. They live in the neighbourhood of the Salor and Sarik Turkoman, and they use the round conical tent of the Tartars, surrounding it with felt and a reed matting; and their clothing and food are Turkoman, as also their occupation, for they are as great man-stealers. They excel the other Aimak as horsemen, and for a chapao, band themselves with men of Herat or with the tribes of Turkomans. It was this cause that led Allah Kuli Khan to transport them from Khiva to the banks of the Oxus, after he had conquered them with the allied Sarik. After a residence of 12 years, they fled, and returned to the town of Murghab. The Jamshidi is polite in word and manner. They still retain parts of the Zoroastrian faith, reverence fire, and pitch their tent door to the east.

The Tajak is Iranian. He is met with in largest number in the khanate of Bokhara and in Badakhshan, but many have settled in the towns of Khokand, Khiva, Chinese Tartary, and Afghanistan; some even to the south, in Baluchistan. The Tajak is of a good middle height, has broad, powerful frame of bones, and especially wide shoulder bones; but they diverge from the Iranian; they have the Turanian wider forehead, thick cheeks, thick nose, and large mouth. The Tajak originally came from the sources of the Oxus in the steppe of Pamir. The term is from Taj, a crown, the fire-worshipper's head-dress. The Tajak, however, does not so style himself, but regards the term as derogatory. The Turks style the Tajak, Sart. The Tajak is covetous, unwarlike, and given to agriculture and trade, but fond of literary pursuits, and polished; and it is owing to their preponderance in Bokhara that that city has been raised to the position of the headquarters of Central Asiatic civilisation, for there, from pre-Muhammadan times, they have continued their previous exertions in mental culture, and, notwithstanding the oppressions which they have sustained from a foreign power, have civilised their conquerors. Most of the celebrities in the field of religious knowledge and belle lettres have been Tajaks; and at the present day the most conspicuous of the Mullah and Ishan are Tajaks, and the chief men of the Bokhara and Khiva court are Tajaks, or, as the Turks style the race, Sart. Professor Vambery considers the Tajak and Sart identical, but he recognises that in their physiognomic peculiarities the Sart differs greatly from the Tajak, being more slender, with a larger face, and a higher forehead; but he attributes these changes to frequent intermarriages between Sart men and Persian slaves. The Tajak

have two branches,—the Galcha and the Tajak of the plains. The Galcha inhabit some of the mountainous districts of Badakhshan, Wakhan, Shighnan, Karatagin, and other Hill States to the east of the khanate of Bokhara. They are also said to be found on the Upper Zarafshan, in the mountain S.W. of Tashkand, and to the E. of Panjkand; and in the latter locality they are called Karatagin. Some, in the secluded alpine valleys of Afghanistan, have preserved their Irani type and language better than the Tajak of the west, who have been exposed to the waves of the Turkish and Mongol conquerors, and who, though obviously Persian, have more or less the heavy cheeks, thick nose, large mouth, and wide forehead of the Turk race.

The language of the Galcha resembles Persian, but has many words of an older Aryan type. The dialects of the Hill States also are known as the Wakhi, Ishkashimi, Shighnani. The Galcha are brave, more than a match for the predatory Kara Kirghiz. The different states are each ruled by a hereditary monarch, most of whom claim descent from Alexander the Great. In their states they form separate communities. In all the others they are dispersed amongst the Turks and Uzbek races, and are following agricultural and commercial pursuits. They have little feeling of nationality, and Khanikoff and Vambery describe them unfavourably for courage, morals, or honesty. The Tajak of the plains are zealous Sunnis.

Ishkashim is a small Tajak state on both sides of the Upper Oxus, tributary to the Mir of Badakhshan. It contains the ruby mines for which Badakhshan is famous.

Wakhan is a small territory in a portion of the valley of the Upper Oxus, or Darya-i-Panj, extending about 94 miles from the fort of Ishkashim, in about lat. $36^{\circ} 45' N.$, long. $71^{\circ} 38' E.$, on the Pamir Kul branch of the Oxus, 42 miles beyond Kala-Panj. It is N. of Hindu Kush, between the Chitral country and the Pamir khanate of Shighnan. It has always been subject to Badakhshan, which it touches in the west. Its inhabitants are of purer Aryan stock than the Tajak, and their language is akin to Sanskrit or Takri. It holds the southern route of the caravan between Turkestan and Afghanistan. To the N. and S. the valley is bounded by high hills, on whose slopes the Wakhan people pasture their flocks. They are Shiah Muhammadans, disciples of Aga Khan of Bombay (died 1881), to whom they sent contributions. They dress in thick trousers and choghas. The valley is ruled by a hereditary chief, whose revenue is derived from the slave trade in which he engages.

Eastern Turkestan rulers have been Muhammadan from the time of Taghalaq Timur, who was, we are told, the first Muhammadan sovereign of Kashgar of the lineage of Chengiz. Buddhism, indeed, was found still prevalent in the cities of Turfan and Kamil at the time of the embassy of Shah Rukh in 1419, and probably did not become extinct much before the end of the century. But in the western states Muhammadanism seems to have been universal from an earlier date, and maintained with fanatical zeal. Sainly teachers and workers of miracles, claiming descent from Mahomed, and known as Khaja or Khoja, acquired great influence, and the sectaries attached to the chief of these divided the people into rival

factions, whose mutual hostility eventually led to the subjugation of the whole country. For late in the seventeenth century, Khoja Appak, the leader of one of those parties called the White Mountain (having been expelled from Kashgar by Ismail Khan, the chief of that state, who was a zealous supporter of the opposite party or Black Mountain), sought the aid of the Galdan Khan, sovereign of the Eleut or Kalmyk of Zungaria. Taking the occasion so afforded, that chief in 1678 invaded the states south of the Tian Shan, carried off the Khan of Kashgar and his family, and established the Khaja of the White Mountain over the country in authority subordinate to his own. Great discords for many years succeeded, sometimes one, sometimes another being uppermost, but some supremacy always continuing to be exercised by the khans of Zungaria. In 1757 the latter country was conquered by the Chinese, who in the following year, making a tool of the White party, which was then in opposition, succeeded in bringing the states of Turkestan also under their rule.

The Turk, wherever met with, is ever heavy and lethargic in his mind and body, but in his resolves firm and steadfast, not from principle, but from apathy and aversion to change; and it is from these characteristics that his appearance is earnest and solemn,—a profound seriousness, a marked cold expression of countenance, with a great inclination to pomp and magnificence. An Uzbek or Turkoman has a proud bearing, as if possessed with a self-consciousness of greatness and power. The Usmanli Turk's love of independence is boundless. He considers himself born to rule; that hunting and war alone are worthy of him, and husbandry ignominious. In Central Asia, agriculture is exclusively in the hands of the Persian slaves, commerce and business with the Tajak, Hindu, and Jew. The Turk is intellectually the inferior of the Iranian and Semitic nations. This defect is noticed by other nations, who apply the terms *Turkluk* (Turkdom), *Kabnluk* (coarseness), and *Yugunluk* (thickness), *Sadeluk* (simplicity); and with these qualities, as the Usmanli is easily taken in by the Armenian, Greek, and Arab, the Turk is as easily so by the Tajak and Hindu. In transactions the Turk are regarded as possessing more honesty, frankness, and confidence, plainness, simplicity, and uprightness. Compared with the Persians, the Turk is a faithful servant, attached soldier, and upright man. They are more brave, persevering, and love more to rule than any other Asiatic people. They are unpolished, wild, and uncultivated, but seldom cruel out of malice. They crave riches, but only to expend them. They exact much labour from their subordinates, but protect and deal liberally with them. The Turk is innately a nomade, and, like other nomades, is distinguished for hospitality. The Burut is the wildest and most savage and most superstitious of them, but less malicious than the Kirghiz and Turkoman. The Burut has not wholly abandoned Shamanism, and knows little of the Muhammadan religion.

The *Kazak Kirghiz* are less brave and warlike, though readily engaging in a pillaging expedition. They form the bulk of the Turkish nomades, and are for the most part devoted to a wandering life; in very few instances have they settled.

The *Kara Kalpak* are considered dull and foolish.

They are even less warlike than the Kirghiz, they have seldom appeared as conquerors, and are even less employed as mercenaries. They are largely occupied as cattle-breeders, and they are active, benevolent, and faithful.

Many of the *Turkoman* dwell in a half-settled state along the left bank of the Oxus as far as Char Jui, and in Khiva. They are notorious amongst all the races of Central Asia as the most restless adventurers. Throughout the whole globe it would be difficult to find a second nation with such a restless spirit and untameable licentiousness as these children of the desert. To rob, to plunder, to make slaves, is to the Turkoman honourable; they are always poor, and are dirty and avaricious. Their country is the wildest and most savage, where even keeping a few cattle gives only a scanty income.

The *Uzbek* are honest, upright, and have much Turkish open-heartedness; they are proud of their education, and represent all the best side of the national character of the Turks.

In *Central Asia*, the warrior, the shepherd, the priest and the layman, youth and old age, equally affect poetry and reciting of tales. The literature of the Muhammadans or settled nations, brought from the south, is filled with exotic metaphor and illustration. In the three khanates, the Mullah and Ishan have written much on religious subjects, but its mystical allusions are beyond the reach of the people. The Uzbek, the Turkoman, and Kirghiz esteem music as their highest pleasure, and often break out in song, singing soft minor airs. The Uzbek poetry on religious subjects is exotic, derived from Persian or Arabic sources. The Tartar compositions are tales, and relate to heroic deeds similar to the romances of Europe.—*Trotter's Central Asia, Bokhara; Collett's Central Asia, Khiva; Major Wood's Lake Aral; H. W. Bellew, C.S.I. Kashmir and Kashgar; Fraser's Travels; Professor Vambery, Russians in Central Asia*, p. 67; *Vambery, Sketches of Central Asia*, pp. 283-338; *Fule's Cathay, and the Way Thither*, i. p. 206, ii. p. 547; *Tinkovskii, Journey to Pekin*, i. p. 378, 379, ii. p. 312; *Surveyor-General's Report; Peschel, Races of Man; Winwood Reade, Savage Africa; Anthropological Review; Barth, Travels in the Interior of Africa, From Moptoa, Tunis and Tripoli; Livingstone's Travels; Cameron's Walk across Africa; Stanley, Through the Dark Continent; Burton, Zanzibar; Dr. Kirk; Lieut.-Col. Rigby; C. Markham in Moral and Material Progress; Mr. R. Cust in Philological Institute.*

AFGHANISTAN, in all historic times, seems to have been an arena in which powerful races have been striving for dominion,—Scythian, Mede, Greek, Persian, Moghul, and Turk races, Ghilzæ, Sadozai, and Barakzai tribes; even the British have ruled there, and the limits of the ruler's sway have been continuously on the change.

Little is known of the occurrences up to the invasion by Alexander the Great. After that conqueror's death, his lieutenant Seleucus succeeded to the sovereignty of the Asiatic conquests. But under Seleucus' grandson, Afghanistan was taken from the Seleucids by aboriginal chiefs, and soon after formed, with Bactria, an independent state, which existed through 150 years. Subsequently Scythians made themselves masters of Afghanistan, and appear to have held

possession of it up to the death of Mansur, when one of his officers, Sabaktagin, established an independent dominion over all the S. parts of Afghanistan, making Ghazni his capital. His son Mahmud, who died A.D. 1028, enriched Afghanistan with the spoils of India; but in the reign of Bahram, one of the Tartar's descendants, the Sabaktagin dynasty were deprived of all but the Panjab, and this too, in A.D. 1160, they lost. Afghan rulers at different times have laid claim to the region embraced between lat. 30° and 37° N., and long. 61° and 70° E.; but the whole of the country of the Yusufzai clans, of Kafiristan, of Chitral, of the Afridi, of the Waziri, and much of the Hazara country are essentially democracies, and pretend as little to owe allegiance as the Anir of Kābul cares to claim it; while Badakhshan, Kunduz, the Char Vilayat, the Aimak country, the Hazara, the Ghilzæ, and the Kakar, as also Kuram, Khost, and Dawar, only yield obedience when the demand is backed by force. So little have the tribes amalgamated, that the region which Europeans designate Afghanistan is not even known by that name to the people who inhabit it. The term Afghan is hardly known to any of the Muhammadans of Asia, and the original countries of the various tribes is equally unknown. It has, however, been satisfactorily ascertained that the lower valleys of the Kābul country were once occupied by Buddhist and Hindu religionists, and that the present Afghan tribes have advanced into the N.E. corner of Afghanistan within comparatively recent historical times; the peaks of the Safed Koh, between Jalalabad and Kābul, bear such Hindu names as Sita Ram. The Yusufzai and other tribes in the N. are comparatively recent conquerors of the N. hills and valleys, where they have mixed with a free Hindu people, and are fairer than the other Afghan tribes.

There is the certainty that within the three last centuries there were people styled Gabar in the Kābul countries, particularly in Lughman and Bajor, also that in the days of Baber there was a dialect called Gabari. We are also told that one of the divisions of Kafiristan was named Gabrak. That in former times fire-worship existed to a certain, if limited, extent in Afghanistan, is evidenced by the pyrethræ, or altars, still crowning the crests of hills at Gard-dez, at Bamian, at Seghan, and at other places. Near Bamian also is a cavern, containing enormous quantities of human bones, apparently a common receptacle of the remains of Gabar corpses. At Murki Khel, in the valley of Jalalabad, and under the Safed Koh, human bones are so abundant in the soil that walls are made of them. There is every reason to suppose it a sepulchral locality of the ancient Gabar; and coins are found in some number there.

According to Captain Raverty, the people who dwell about Kābul and Kandahar, Shorawak and Pishin, designate themselves B'r-Pushtun or Upper Afghans; and those occupying the district of Roh, which is near India, are called L'r-Pukhtun or Lower Afghans; and Major Fosberry suggests (J.E.S.) that the term Pathan, by which the Afghan races are generally known throughout British India, has been derived from Pushtun or Pukhtun. Although the tribes known by these names speak the Pushtu as a common language, they are not all of the same origin, but are dis-

tinguished by marked characteristics, moral as well as physical. One tribe repudiates another, and denies its Afghan origin. The names of Pathan, Rohilla, Afghan, which serve at the present time to designate the Indian Afghans, are really those of so many distinct races little blended together. In their own country they make no matrimonial alliances except amongst themselves, indicating their feelings as an original race. Afghan has been said to be only an Arabic plural of the word 'feghan,' which was applied to them about the time of Sultan Abu-Seid, of the race of Chengiz Khan, because of their constantly disunited state amongst themselves. The primitive tribe of the Afghans is called 'taifah,' a word which corresponds with that of nation. The first division of this primitive tribe are called 'firqa,' a tribe; and the subdivision of this, 'tirah' or branch.

Mr. Campbell supposes them to be Aryan, and probably of similar origin to the Jat. Several writers consider them to be descendants of one of the ten tribes of Israel, and seven books bearing on this subject were placed at the disposal of Surgeon-Major Bellew, and his examination of them showed their own belief to be that they are descendants from Saul, whose history in these books is in the main like that in the Hebrew Bible. Saul's two grandsons, Asaf and Afghana, served under Solomon.

In its physical features, Afghanistan is a star of valleys radiating from the Koh-i-Baba, and everywhere bounded by very rugged and difficult mountains; the two great ranges, leaving the Bam-i-Danial in the N., being the Mustagh and the Hindu Kush, with numerous offshoots from the latter. The Siah Koh is the S. branch of the Koh-i-Baba, from which the Helmand, the Hari-Rud, the Murghab, Balkh-ab, and Kunduz rivers rise.

The Hindu Kush range is traced from the S.W. corner of the Pamir in Central Asia, in about lat. 73° 30' N., whence rise the Amu Darya, the Yarkand Darya, the Kunar, and the Gilgit rivers. It extends W. as far as the spur which divides the Ghorband valley from that of the Helmand, in long. 68° 30' E., from which point it is called the Koh-i-Baba. In these limits it forms the watershed of the Oxus (Amu Darya) to its N., and the Kābul river to its S.; and its ramifications or breadth may be said to extend from lat. 34° 30' to 37° 30' N., nearly 200 miles. The passes from Chitral to Badakhshan across the Hindu Kush are Chitral, Ishtirab, Kagram, Nuksan, Kharteza, and Dara; from Deh Parian in the Panjsher valley a pass leads by Anjuman to Bamian; the other passes are the Thal, Khawk, Bazarak, Shatpal, Parwan, Saralang, Kaoshan, Gwalian, Gwazgar, Chardar, Gholalaj, Farinjal, and Ghorband.

The Kohistan region commences from Kaghan, which is a narrow glen stretching upwards from the northernmost point of the Hazara district for a distance of nearly 90 miles, and separating the maharaja of Kashmir's territory from the independent mountaineers. It is a district N. of that city, and has the valleys of Tagao, Nijrao, Panjsher, Ghorband, Charikar, Alishang, Alighur, and the Lower Kuner. The villages are small, but numerous; the Kohistani, 40,000 in number, have always been independent; their country is strong for defence. They are bold, violent, and unruly, and

reckon it a disgrace to die in bed. They are prone to individual assassinations; their arms, a carbine, a firelock, a pistol, and short sharp dagger, a few bows and shields. In 1840 the British Indian forces had engagements at Parwandarra, Tutam-darra, Jalgal, Kaldara, Charikar, and Istalif.

Amongst them mulberry flour is the staff of life; and, in their perpetual quarrels, the mulberry plantations of the valleys have, to their credit, always been spared.

The Suliman range is thrown off to the S. from the Allah Koh ridge between Kābul and Ghazni, in lat. 69° 30', and thence running southwards without a break, but throwing off many spurs, it forms the system of mountains of E. Afghanistan and Baluchistan. Takht-i-Suliman is the name given to two peaks on the spur of the Suliman range, which forms the S. watershed of the Zhob river, and ends in the Gomal river at Ghwalari. The N. peak is in lat. 31° 41' N., long. 69° 58' 40" E., and rises 11,298 feet above the sea. The S. peak is in lat. 31° 35' 40" N., long. 70° 0' 40" E., and rises 11,070 ft. No European has ascended it.

As will have been seen, the Afghanistan country is entirely mountainous, but it has numerous flat-bottomed valleys hemmed in by the mountains. These valleys are so large as to permit the evolutions of an army, and this feature explains why these mountaineers carry on most of their warfare on horseback, and are proud of their cavalry and its clan. The region has many rivers of small size, and many irrigation canals. From its high elevation above the sea, the climate is very severe. The people are chiefly pastoral nomades, and even when settled, live in tents. The towns are of no great size. Kābul, the present capital, has a population of 50,000 or 60,000 souls. The Kandahar population was estimated by Dr. Bellew at from 16,000 to 20,000 houses, or from 60,000 to 80,000 souls. Herat has from 6000 to 10,000 inhabitants; Maemana, 40,000; Kunduz, about 6000 or 7000; and Shibbargham, 12,000.

In calling their country Walayat, the Afghans distinguish two portions of it as—(1) Kābul or Kābulistan, N. of Ghazni and the Safed-Koh, as far as the Hindu Kush; and (2) Khorasan and Zababistan, S. and W. from Ghazni to Persia and the desert of Seistan. Its greatest length is 750 miles, and greatest breadth 550 miles. Afghanistan is further recognised by its people as comprising the provinces of Kābul, Jalalabad, Ghazni, Kandahar, Herat, and Balkh, or, as the last is now called, Afghan-Turkestan. To these are sometimes added the districts of the Ghilzai and of the Hazara. Its ruler is known as the Amir, and his revenues are estimated at forty lakhs of rupees, or less than half a million sterling.

Kābul is the name of a province, a city, and a river. The city is in lat. 34° 30' 30" N., long. 69° 6' 8-31" E., and is 6396 feet above the sea. On the right bank of the Kābul river, near the junction of the rivers Kābul and Logar, and at the west extremity of a spacious plain, is an angle formed by the approach of two inferior ridges, the Koh Takht Shah and Koh Khojah Safar. The town is about 8 miles in circumference. The population, as has been said, amounts to 50,000 or 60,000 souls in about 9000 houses. Kābul is well situated as a site for commercial intercourse between India and Turkestan, being at the gorge of the nearest and most practicable passes connecting the two

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countries. It is the seat of government of Afghanistan. The thermometer maximum in August is 90°, the minimum in October 30°.

The *Kazzilbash* dwell in the Chandol quarter, without the city, on the W. It is fortified. A brigade of the British Indian army occupied Kabul in the years 1839 to 1841, but had a series of reverses from the 2d November 1841 till the 6th January 1842.

The province of Kabul has the Koh-i-Baba on the N.W., the Hindu Kush on the N.; the Panjsher river is on the N.E., and on the E. it extends as far as Jagdalak. On the S. it has the Safed Koh and Ghazni, and on the W. the country of the Hazara. Much of this province is mountainous, but it contains a large quantity of arable land, rich along the base of the mountains. Wheat is the chief product, and after it barley and peas, the two last being largely consumed by the poor. Sheep, corn, rice, ghi, horses, and ponies are imported. The annual revenue amounts to £180,000.

The Kabul river rises by two heads, the northern from a copious spring at Sar-i-Chashmah, in lat. 34° 21' N., and long. 68° 20' E., at an elevation of 8400 feet. At a short distance beyond Kabul it receives the Logar river from the S., and thence assumes the form of a large stream, which becomes of importance at Jalalabad, and finally falls into the Indus at Attock, after a course of 300 miles.

Kandahar, a town and fortress in Afghanistan, is in lat. 31° 37' N., and long. 65° 28' E., and 3484 feet above the sea. It is situated between the Argandab and Tarnak rivers on a well-cultivated plain. It is 233 miles S.W. of Ghazni, 380 miles S.E. of Herat, and 144 miles N.W. of Quetta or Shal. It is an ancient city, supposed to have been one of those built by Alexander the Great, since whose time it has been successively in the hands of the Seleucides, the Arabs for 600 years, the Persians from A.D. 1535, the Chaghtai Turks, the Uzbaks, the Persians again, the Afghans (1747), the British (1839), again the Afghans, again the British (1880), and again (1881) the Afghans. A brigade of the army of British India held it from the 20th April 1839 to the 8th August 1843. It is surrounded by a mud wall 27 feet high, with six gates, and a ditch 10 feet deep and 24 feet wide. Its districts are occupied by separate tribes, —Barakzai, Nurzai, Alekozai, Popalzai, Bamezai, Bardurani, and Alizai. The houses are stated by Hough to be 40,000, by Bellew 16,000 to 20,000, and the population has been estimated at from 15,500 to 100,000. The citadel is on the N., and the tomb of Ahmad Shah is near. The place has many sickly people, and also many poor beggars and idiots (*houllial*), who are revered. The trade to Herat and Mashad is in the hands of Persians. Wine is made at Kandahar. The summer is hot, but the winter pleasant.

The *Herat* province contains the districts of Ghorian, Sabzawur, Farrah, Bakwa, Kurak, and Obek, in which there are 446 villages, with about 70,000 fighting men. The tribes are the Turkoman Tekke, Sarakh, and Salor, the Irsali, Charsanghi, the Persian Hazara, Jamshidi, Taemumi, Taemuri, and Firoz Kobi, and the Berbari Hazara. The city of Herat is in lat. 34° 22' N., long. 62° 9' E., and 2650 feet above the sea. It is built on the right bank of the Hari-Rud, and is distant as under:—

Kandahar, N.W., miles 369	Peshawur, by Kanda-
Ghazni, 602	har and Kabul, miles 881
Kabul thro' Hazara, ,, 550	Dehra Ismail Khan, ,, 892
„ „ Ghazni, ,, 691	Sakkur, 762
Teheran, 700	Yeza, 337
Khiva, 700	Mashad, 215
Bokhara, 600	Balkh, 370

It is situated in a fertile and well-watered valley, surrounded by lofty mountains. The population has fluctuated from 6000 or 7000 to 100,000, as war or peace reigned. The people are mostly Shiah Muhammadans, but Afghan, Persian, Indian, Tartar, Turkoman, and Jew are there, all carrying weapons. Herat is the emporium for traffic between Kabul, Kandahar, Hindustan, and Persia. Carpets are made there of great beauty, ranging in prices from 10 to 1000 rupees. Its fortifications are nearly of a square form, 1600 yards by 1500 yards. It has been besieged oftener than any city of Asia. It fell to the Turkoman in the reign of Sultan Sanjar in 1157, who left not one stone upon another. In 1232 it was twice taken by Tuli Khan, son of Chengiz Khan. On the first occasion he put all the garrison to death, and on the second he massacred 160,000 of the population, only 40 persons escaping. Centuries afterwards it again revolted, and Miran Shah, son of Timur, entered the city with a large force and decimated the inhabitants; a similar fate overtook it when taken by Olong Beg, grandson of Timur. In 1477, Jahan Shah, a Turkoman prince, ravaged it. In 1554, Abad Khan, an Uzbek prince, burned and pillaged up to its gates. In 1607 it was sacked by the Uzbaks. In 1730 it was taken by Nadir Shah; in 1750 it fell to Ahmad Shah, Daurani. In 1823 it was besieged by the Persians; in 1824, by Kamran; from November 1837 to the 9th September 1838, it was besieged by the Persians, while Lieutenant Eldred Pottinger was within the walls, and his conduct and influence made the defence successful. On the 24th October 1856 it was surrendered to the Persians. But since then, in 1863 (27th May), it was taken by the Amir Dost Muhammad Khan, and after his death was again fought for by his sons and descendants.

Seistan province was formerly a separate dominion. In recent times it has been claimed by rulers of Persia, Afghanistan, Kandahar, and Herat. It is situated between lat. 30° 30' to 32° N., and long. 60° 30' to 64° E.; and at present it has the four districts of Lash, Shaikh-Nasur, Sehkuha, and Kandahar-Seistan, under four chiefs. In Lash are the Ishaqzai Daurani Afghans; in Sehkuha are Kayani and Towki Baluch; in Shaikh-Nasur are Sarbandi Baluch; and the Garm-sel has Baluch and Afghans mixed,—the total population being about 127,000. Numerous rivers from the N. and N.E. enter it, and at one period of the year overflow their banks. The most important of them are the Helmand, Farrah-Rud, Harut-Rud, and Khash-Rud. The Seistan lake is more a marsh than a lake, and wild hogs abound in its reedy parts, with clouds of insects, wasps, mosquitos, fleas, and flies. The bite of one of the flies is painful, and horses suffer much from them.

Afghan-Turkestan is a name that has been applied to all the Afghan dominions of North Hindu Kush and Koh-i-Baba. It comprises the Uzbek states of Maemana, Andkhui, Sar-i-Pal, Shibbargham, Balikh, Khulu, Kunduz, and Badakhshan.

Kunduz is the name of a district, a river, and a

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town. The town is wretched, and is on the right bank of the river just before it joins the Farkhan river. It is 650 miles from Yarkand, 370 miles S.S.E. from Samarcand, 390 miles S.E. from Bokhara. The other fortified towns in the district are Hazrat Imam, Talikhan, and Rustak.

Maemana is a walled town 172 miles N.E. from Herat, and 28 miles S. of Bokhara. The inhabitants are Uzbek, with some Tajak, Herati, and a few Jews, Hindus, and Afghans. They are the bravest of all the Uzbek, and are renowned throughout Central Asia for their fearlessness and determined disposition. The district is 18 miles broad and 20 miles long, and the population is estimated at 40,000 families.

Khulm is the name of a river, a district, and a town. The town is 307 miles N.N.W. of Kūbul, and 310 miles S.E. of Bokhara. The population of the district is estimated at 700,000 souls. Since the early part of the 19th century, Khulm has been visited by Moorcroft, Burnes, Lord, and Ferrier.

Shibbargham, 60 miles W. of Balkh, has 12,000 souls of the Uzbek and Parsivan races.

Shaghan district is on the left bank of the Amu Darya, between Vakhān and Rashān.

Vakhān is a district of Badakhshan-Afghanistan, which consists of the portion of the valley of the Amu Darya from Kala Khojah upwards, and includes the valleys of Sarhad and Sar-i-Kol, the last being a dreary, uninhabitable waste for the greater part of the year. The population is about 1000. The Mir claims descent from Alexander. It produces shawl wool.

i. Daurani tribes, 600,000, viz. :-

a. Popalzai.	d. Atchakzai.	f. Ishakzai.
b. Alikuzai.	e. Nurzai.	g. Khugiani.
c. Barakzai.		

ii. Tarin, 38,000, viz. :-

1 Shadizai.	a. Spin Tarin, viz. :-	4 Adwani.
	2 Marpani.	3 Lasran.
	b. Tor Tarin, viz. :-	
1 Batezai.	7 Alizai.	12 Abdur Rah-
2 Haikalzai.	8 Nurzai.	manzai.
3 Malizai.	9 Kalazai.	13 Hobilzai.
4 Kadazai.	10 Naezai.	14 Hamranzai.
5 Khanazai.	11 Musizai.	15 Karbela.
6 Khamzai.		16 Khidarzai.

iii. Kakar, 72,000, viz. :-

a. Jalazai.	d. Usman Khol.	g. Hamzazai.
b. Musa Khol.	e. Abdulazai.	A. Shahoza.
c. Kadizai.	f. Kalizai.	i. Khidarzai.

iv. Ghilzai, 276,000, viz. :-

	a. Ibrahim, viz. :-	
1 Zabr Khol.	5 Chaloza.	9 Khwazak.
2 Ahmadzai.	6 Chinzai.	10 Stanizai.
3 Umar Khol.	7 Shahmomalzai.	11 Ali Khol.
4 Adamzai.	8 Kaisar Khol.	12 Andur.

	b. Turan, viz. :-	
1 Ohtak.	2 Tokao.	3 Hotaki.

v. Povindah, 30,000, viz. :-		
Lohani.	Nasir.	Nazai.
		Kharoti.

vi. Waziri, 127,500, viz. :-		
Mahaud.	Uzmanzai.	Ahmadzai.

vii. Sheorani, 30,000

viii. Turi, 21,000, viz. :-		
1 Gundi Khol.	3 Mastu Khol.	5 Dopazai.
2 Alizai.	4 Hamza Khol.	

ix. Zaeinukht, 21,000, viz. :-		
1 Mamuzai.	2 Khwahdad Khol.	

x. Orakzai—Ali Khol.		106,000
xi. Dawari.		34,000
xii. Khostwal.		12,000

xiii. Afridi, 85,000, viz. :-

1 Kuki Khol.	4 Kamr.	6 Aka Khol.
2 Malik Din.	5 Zakha Khol.	7 Sipah.
3 Kambar.		

xiv. Jaja (Jaji), 7000, viz. :-

1 Kehwani.	4 Ahmad Khol.	7 Husan Khol.
2 Ada Khol.	5 Ali Khol.	8 Koria Ahmad Khol.
3 Potla.	6 Jamu Khol.	

xv. Mangal, 3000, viz. :-

1 Miral Khol.	3 Zab.	5 Kamal Khol.
2 Khajuri.	4 Margao.	

xvi. Jadran, 3,000

xvii. Shinwari, 50,000, viz. :-

1 Khoja Khol.	3 Murdad Khol.	5 Syud Khol.
2 Shokhmai Khol.	4 Ashkhol Khol.	6 Sangu Khol.

xviii. Momand, 80,000, viz. :-

1 Tarakzai.	3 Baizai.	5 Uzmanzai.
2 Alamzai.	4 Khwalzai.	6 Dawozai.

xix. Yusufzai (Kashistan), 400,000, viz. :-

1 Baezai.	5 $\frac{1}{2}$ Hanzai.	9 Daulatzai.
2 Khwazozai.	6 Akazai.	10 Chagarzai.
3 Malizai.	7 Mada Khol.	11 Nurizai.
4 Turkilani.	8 Iizai.	12 Uzman Khol.
5 Uzmanzai.		

xx. Badakhshan, Darwaz, 55,000

xxi. Kunduz, Khelm, Balkh,	253,000
xxii. Char Vilayat,	237,000
xxiii. Aimak,	250,000
xxiv. Hazara,	150,000
xxv. Chitral, Nimcha, Lughmani,	150,000
xxvi. Kafar,	100,000
xxvii. Kohistan,	100,000
xxviii. Seistan,	127,000
xxix. Bangash,	21,000
xxx. Kazzilbash,	150,000
xxxi. Tajak,	500,000
xxxii. Hindki and Jat,	600,000
xxxiii. Mixed population of towns,	65,000

Of these races and tribes, it may be mentioned that, physically, the Afghan people are among the finest on the earth, with a broad, robust, ruddy, manly look, and they are hardy and bold. They have a pleasant, frank, simple, unaffected way. About Kabul they are fair, many with red hair and blue eyes, but some of the tribes in the lower and hotter hills and valleys near India have rather dark skins. The majority are astute, intriguing, ambitious, and faithless; avaricious, fickle, uncertain, and crafty; and in bold, unblushing lying a Hindu is a mere child to an Afghan. But, since the middle of the 19th century, the eastern Independent and British tribes have been largely, and in increasing numbers, employed in the native army of British India. General Ferrier describes their black eyes as full of fire; the lids are tinged with antimony, for this, in their opinion, gives force and adds beauty and a dazzling brilliancy to them; their black beard is worn short; and their hair, of the same colour, is shaved off from the front to the top of the head. The remainder at the sides being allowed to fall in large curls over the shoulders. Their step is full of resolution, their bearing proud, but rough.

Every Afghan, writes Colonel MacGregor, is born a soldier; and their army, though in a miserable and confused state, moves with great rapidity, and over immense distances.

The mass of the army is cavalry. This form is adopted from the national character, and the nature of the climate and soil. Their love of war exceeds that of all other eastern nations; they are excellent skirmishers, and experienced foragers.

When he wrote (1876), the Afghan army, 71,000, was in three divisions:—

	Horse.	Infantry.	Total.
Kabul,	21,000	10,000	31,000
Kandahar,	12,000	6,000	18,000
Herat,	12,000	1,000	22,000

The horse was composed of Afghans, Kazzilbash, and Hazara; their infantry of mountaineers, Uzbek, Parsivan, Hazara, and Baluch. There were, besides, many Jazailchi and matchlockmen, all excellent skirmishers.

North of the Hindu Kush is the country of the Uzbek, which includes Maemana, Andkhui, Akcheh, Sar-i-Pul, Balkh, and Kunduz.

The Aimak and Hazara occupy the upper portions of the valleys of the Murghab, Hari-Rud, Helmand, and Arghandab, known as the Hazarajat.

The country of the Daurani extends for 30 miles north and south of a line drawn from Herat through Kandahar to Shal-kot (Quetta).

The Baraich Afghans are great camel breeders. They occupy Shorabak, due east of Seistan, on the banks of the Lora. Seistan lies on the rivers Helmand and Farrah-Rud, and the Seistan people occupy the lower portion of all the rivers running to the Seistan lake. They eat wheat and maize, and mutton, fowls, and hares. Their women are not pretty; their language is Persian mixed with other words.

Seistan has been at times Persian, and at times under the Afghans. Its adult male population has been variously estimated at from 20,000 to 30,000 families by Elphinstone, Taylor, Conolly, Ferrier, Leech, and MacGregor, and is supposed to amount to 127,500 souls, with 30,000 fighting men. Elphinstone supposes the original population to have been Tajak. Its inhabitants now consist of the Kayani, Sarbandi, Towki, Ishaqzai, and Shahreki, all of whom are shiahs, and of Baluch, who are sunni Muhammadans. Ferrier estimated the fighting men of the Baluch of Seistan at 30,000 or 35,000. Contrasting them with Afghans, he says, Afghans are good for a rush, but do not meet the shock of an attack or stand the fire of artillery. The Baluch surpass them in tenacity and bravery; they attack in small parties of ten or twelve, are bold in the advance, and remain firm under the fire of an enemy, tying their tunics together.

The great clan of the Ghilzæ, once dominant and still powerful, occupy, on the N. and E. of the Daurani, the upper portion of the rivers Logar and Tarnak, and all the plain country between the E. and W. watersheds of these rivers.

The Siah Posh, and the kindred race in Chitral, are in a triangular tract bounded by the Panjsher river, the south range of the Kunar, and the Hindu Kush.

The Yusufzai occupy all the valleys which drain the Laspisar range and its ramifications. This tribe are involved in domestic strife, but are united against foreign aggression.

Southwards, fringing the eastern spurs of the Safed Koh, are the independent Momand, Afridi, Orakzai, Shinwari, Turi, Khatak, and Bangush tribes.

Still farther south are the Waziri, stretching across the debouchure of all the valleys from the Kuram to the Gomal, and shutting off from the plains the small tribes of Jaji, Permuli, Dawari, and Khostwal.

The Povindah occupy a triangular tract bounded by the districts of the Ghilzæ, Waziri, and Kakar. The Kakar extend N.E. from the Shal valley to the Takht-i-Suliman.

The Uzbek in Afghan-Turkestan are supposed to amount to 350,000, viz. :—

Kunduz,	170,000	Shibbargham,	10,000
Maemana,	80,000	Akcheh,	7,000
Sar-i-Pul,	60,000	Balkh,	5,000
Khulm,	15,000	Andkhui,	3,000

In their advance from the north, the Uzbek have been stayed by the Hindu Kush, and by the equal, if not greater, valour of the Afghan. The Kataghan tribe in the Kunduz province, north and south of the Amu Darya (Oxus), number 42,000 families.

Sar-i-Pul town is 100 miles S.W. of Balkh, and has about 18,000 souls, dwelling in houses and tents. The chief and most of the population are Uzbek.

The Saharai, literally people of the plain, is a tribe who call themselves Mongol. They inhabit the plain on both banks of the head-waters of the Murghab, and claim to have been settled there by Chengiz Khan, and to have ever since preserved their independence. They are a small patriarchal republic. They are idol-worshippers, but recognise a good (khuda) and an evil (shaitan) principle.

The Aimak are a Mongoloid race inhabiting the western portion of the Paropamisian mountains between Kabul and Herat. They are bounded on the north by the Uzbek, on the south by the Daurani, on the west by Persia and the Turkomans, and on the east by the Hazara. They acknowledge relationship with the Mongols, Chaghtai Turks, and Kalmuks, and intermarry with these nations. They are shepherds and cultivators, are brave and savage, plundering wherever an opportunity occurs. They speak a dialect of Persian, but Baber mentions that in his time many of them spoke the Mongol language. Their wars are carried on with great cruelty. They have four sections,—the Firoz Kohi, Taemuni, Taemuri, and Zuri. Aimak, in Turki, means a tribe.

The Taemuri and Hazara, west of Herat, are subject to Persia, dwelling in sandy tracts interspersed with barren hills.

The Taemuni inhabit the S. slopes of the Siah Koh branch of the Hindu Kush about Ghor, to the N. of Girishk and Sabzawur. They could collect 20,000 fighting men. They are a powerful tribe of brave men. They have a lead mine at Sharak.

The Firoz Kohi Aimak unsuccessfully defended themselves against Timur, and were deported to the neighbourhood of Herat. They now occupy the mountainous country between Herat and Maemana, extending up the Hari-Rud. They are estimated at from 20,000 to 30,000 families.

The Zuri inhabit Sabzawur or Isfazar, which is an extensive plain to the east of the road from Farrah to Herat, and situated among mountains.

The Aimak and the Hazara have been supposed to be of the same race, separated from each other by the sectarian views they have assumed, the Aimak being rigidly sunni, and the Hazara violently shiah. They resemble each other in their Tartar features and habits, and in the

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despotic character of their government. Their chiefs are absolute, levy taxes, keep soldiers in their pay, and dwell in castles. The Aimak live in camps, in Khirgah tents, which they call Urd, each governed by a Ket Khuda.

The Hazara, or Hazarajat, are so called from the innumerable Taifah, or tribes, into which they are divided.—Hazar signifying in Persian a thousand. Their principal subdivisions are (1) Deh Zangi, (2) Deh Kundi, (3) Jaguri, (4) Faoladi, (5) Deh Chopan, (6) Shaikh Ali. They occupy the whole range of the Paropamisus, or the mountains extending between the Hindu Kush and the city of Herat, to within a few days' march of Kandahar. The inhabited parts are 5000 to 10,000 feet above the sea, and the highest peaks rise to 20,000 feet. Their numbers have been variously estimated at from 50,000 to 300,000 souls by Elphinstone, Bellew, Burnes, Wood, Leech, and Lumsden. They are supposed to be of varied origin. The Hazara of the hill country near Ghazni and Kandahar are Turanian in a marked degree, and are without doubt of Mongolian blood. They seem to be in many ways like the Brahui, and at one time they possessed the country on the Kalat side of Kandahar, and were then nearer to the Brahui than they now are. In appearance, these very much resemble the Gurkha; they have the same high cheek-bones, the same small eyes, very little beard, and no doubt are of Turanian origin.

The Hazara are a middle-sized race of stout make, with small grey eyes, high cheek-bones, and wanting in beard. They are of harsh aspect, and are ashamed of their beardless Tartar appearance. They are simple, mild mannered, and industrious, but unblushing beggars and thieves. They are, as a tribe, weak, vacillating, and disunited, very passionate,—at one moment fickle and capricious, and again merry, conversable, and hospitable. Their women are slender, handsome, engaging, and immoral. The Jaguri tribe follow the 'Kooroo Bistan' custom of lending their wives for a night or for a week, and do this to so large an extent that they are said to be losing their Tartar form of features, to which they have a great aversion. Broadfoot, however, limits his remarks on this part of their character to the observation that the women are ugly and not very chaste. The men do all out-door labour, and the women manage the house. They are never beaten. They sing and play on the guitar, and many of them are poets. Their out-door amusements are hunting and racing. Their clothing is made of the coarser camel-hair cloth called 'barak,' their boots of rough goat-skin, and they twist rolls of cloth around their legs. The women go unveiled; twist two or three lungi on their head like a tiara; they wear long woollen frocks, and boots of soft deer-skin, which reach to their knees. The weapons of the men are sword and matchlock, the latter being most trusted to. They manufacture excellent powder, and are good shots. Some of the clans have a military reputation; they would make good soldiers, and might have risen to distinction, but they are disunited. Their food consists chiefly in the flesh of their sheep, oxen, and horses; grain is scarce, and their bread is tasteless, as few of them can

afford to use salt. They are poor, and in times of scarcity they voluntarily dispose of some of their children to the Uzbek slave-dealers. Each village

is defended by a high tower capable of containing ten or twelve men, loop-holed, with a kettle drum, and in time of peace a single man remains in the tower to sound an alarm if necessary. They are violent shialhs, reverence Ali and his Syud descendants, but practically they have no religion, observe no forms or fasts, and have no form of prayers. They speak a kind of Persian; they are very ignorant and illiterate. Their titles are Khan, Sultan, Ikhtiar, Wali, Mir, Mehtar, and Turkhan. They barter men, women, oxen, cows, sheep, ghi, carpets, sulphur, and lead, with merchants from Kabul, Herat, Turkestan, and Kandahar, in exchange for coarse cotton cloth, chintzes, tobacco, felts, carpets, dye-stuffs, iron spades, plough coulters, molasses, and raisins. Almost every tribe is at war with its neighbours; and they are constantly exposed to inroads of Uzbaks from the north, who sweep away whole villages into slavery. The Aimak also carry off as many of them as they can conquer or kidnap; and the chiefs of their own race in their petty wars steal each other's subjects and sell them to Turki merchants. All the unskilled labour in Kabul is done by Hazara, some of them slaves and some of them free; and in winter there are not less than 10,000 of them residing in the city, earning a livelihood as porters and by clearing the snow from off the house-tops. The Hazara pay tribute to the Afghans. Their property consists in dumb (big-tailed) sheep, and a small, hardy breed of horses. Their country has lead and sulphur; they make 'barak' or hair cloth and good carpets.

The Jamshidi Hazara are of undoubted Iranian extraction. These are estimated at only 8000 to about 12,000 families, and are very poor. They inhabit the country north of the range of mountains which bound Herat. They live in black felt tents; they assist the Turkoman in their slaving raids. The women make fabrics of wool and goat's-hair, which sell well in Persia.

The Hazara Zeidnat are a rashly brave, ferocious mannered tribe, occupying the country at the sources of the Murghab river in Afghanistan, and could muster 12,000 fighting men. They number 28,000 tents. They make large quantities of cloaks from 'barak' hair-cloth, rear horses, and have great flocks of sheep, goats, and herds of camels and oxen. In 1817, Yar Muhammad defeated Karimdad, and deported 1000 of their families to Herat; and in 1857, the Persians, after their capture of Herat, removed the whole tribe within the Persian territory, taking from them all their baggage and cattle to prevent them running away. There are no better horsemen in Asia. Their women pride themselves in their ability, when necessity requires, to mount a horse, and use a matchlock and sword with an intrepidity equal to that of their warlike husbands and brothers. They are not pretty, but are well made, enjoy perfect liberty, and their husbands are not jealous of them. In time of peace they do all the household and field work, and with their children weave the 'barak' cloth.

The section of the Zeidnat inhabiting the country 100 miles N. of Herat are sunni Muhammadans. They are renowned for their courage, are considered the most noble of the Hazara, and have the title of Sar-i-Khuna, literally chief of the race. They have 28,000 tents. They have numerous flocks of sheep, camels, and buffaloes, and rear

excellent horses. They make 'kourk' or 'barak' hair-cloth from the fine silky wool that grows on the belly of the camel. A piece of barak costs from Rs. 5 to Rs. 40, and suffices for a robe. These are worn in the winter by Afghans and Persian nobles. The wool on the other parts of the camel's body makes a coarser cloth. Their horses are of the Turkoman breed, smaller and not so well formed as those of the Teki, but steadier, and their powers of endurance are unequalled.

The Pusht Koh Hazara dwell S. of the Hindu Kush and its Safed Koh branch. They are divided amongst themselves, and constantly at war with the Afghans.

The Daulat Pahi section of the Hazara inhabit a portion of the plain of Urt and valley of Siah Sang to the south of Bamian.

The Deh Zangi Hazara is a great tribe occupying the country N.W. of Bamian. They have four sections, and 10,500 families. They are Shi'ahs. Most of the Hazara slaves in Turkestan are of this tribe.

Timur seems to have been the last who held the Hazara in subjection. After his death they resumed independence.

The Daurani Afghan tribe occupy the country N. and S. of the road between Herat and Kandahar, 800 miles long and from 80 to 150 miles broad. It has the Paropamisian mountains on the north, inhabited by the Aimak and Hazara. On the west it has a sandy desert, which separates it from Persia; on the S.W. it has Seistan and another desert that separates it from Baluchistan; its southern boundary is formed by Shorawak and the hills of Khojah Amran, and it joins the Ghilzai country on the east. The tribe has two great divisions,—Zirak, with four clans—Popalzai, Alikuzai, Barakzai, and Atchakzai; and Panjpao, with five clans—Nurzai, Alizai, Ishabzai, Khugiani, and Maku. The whole population of their country is estimated at 600,000 souls, of which the Daurani themselves are one-half. They hold their lands on military tenure. They are partly pastoral and partly agricultural, and they speak with delight of the pleasures of their camp life. They term their summer and winter grounds Eilak and Kishlak, dwelling in their coarse black camel tents, called Kishdi, the same with the Kara-ulli of the Turks and Siah-chadar of the Persians.

Each of the great clans of the Daurani is ruled by a sirdar chosen out of the head family, and the spirit of revenge for blood is much controlled. They have no feuds, and never go armed except on journeys. There are shops in their towns kept by Hindus. The Kishdi or black tents of the shepherds are 20 to 25 feet long, 10 or 12 feet broad, and 8 or 10 feet high. The inclement tracts are left by the shepherds in winter for the plains. They treat their wives kindly, are conspicuously hospitable; like other Afghans, do not abstain from plunder, but they have a consciousness of superiority and a sense of natural dignity, and are respected by all Afghans. They are extremely attached to their country, and have a reverence for Kandahar, to which the bodies of their great men are carried for interment, even from Kashmir and Sind. They travel little, and have never come to British India as merchants or adventurers.

The Saddozai is the chief branch of the Popalzai clan of the Daurani; Ahmad Shah was a Saddozai. He thrice invaded India, and on the third occasion he fought and won the battle of Panipat (6th January 1761), when about 300,000 Mahrattas fell, amongst them the son and the cousin of the Peshwa, and the Mahrattas as a nation ruled by the Peshwa were broken up.

The Nurzai section of the Panjpao Daurani are a martial tribe of about 30,000 families, most of them shepherds. They occupy, along with Iliyat, the district of Sabzawur, which town is 93 miles from Herat and 286 miles from Kandahar. They hold a congeries of forts with their pasturage and cultivated fields around.

The Khugiani tribe of the Panjpao Daurani have three divisions,—Waziri, Khairbun, and Sherzad. The Waziri have given the Panjab province of the British Indian Government much annoyance. The Khugiani reside chiefly in the Gandamak valley of Jalalabad, and have now about 5312 houses.

The Alikuzai number 10,000 families, and are mostly agricultural. The Alizai are pastoral; their numbers are stated to amount to 15,000 families.

The Atchakzai Daurani are entirely nomades, living in black tents in the ranges of Khojah Amran. They say they can muster 14,800 families, in 32 divisions.

The Daurani are stout and well made, with long hair and beards, many of them being above the standard of the Indo-Germanic races of Europe. Some have round and plump faces. With others, the countenance is strongly marked, and with most the cheek-bones are prominent. When a family is by itself, the men and women eat together; but few restraints are put upon the female, and her influence is considerable. The Daurani tribes, all but the Atchakzai, about 5000 in number, are religiously given, but not intolerant. They are of the sunni sect. Their national dance, called Attun, is danced almost every evening, with songs and tales to accompany it. They are fond of tales and fond of the chase.

The Daurani and the Ghilzai clans, from their numerical strength, have exercised greater power than other of the Afghan tribes. The Daurani are known also as the Sulimani, from the mountains whence they came, having dwelt in the Tobeh Maruf district.

The Kufelzai, more generally known as the Popalzai, numbering 20,000 families, are an offshoot of the Abdali, one of the branches of which, the Saddozai, gave sovereignty to the Afghans in the 17th and 18th centuries.

Their name Daurani is titular. Ahmad Khan, of the Saddozai branch of the Abdali, about the close of 1747 was crowned at Kandahar under the title of Ahmad Shah, Daurani, which Elphinstone says means pearl of pearls, but is commonly understood to refer to the dominion of the world (Dauran). From his time up to 1820, his descendants have ruled; but since the last-mentioned date the Barakzai, a great clan of the Zirak branch of the Abdali, have been furnishing the ruling family in Kabul. Their numbers are about 30,000 families. The great bulk are pastoral, a few engage in tillage in the country S. of Kandahar, in *Arghestan*, and on the banks of the Helmand.

The Tarin are a tribe in Afghanistan who have

two divisions, viz the independent Safed or Spin Tarin, and the Tor Tarin in the valley of Peshin, who are subject to the Kandahar Government. The Safed Tarin (White Tarin) could muster 6000 fighting men, and the Tor Tarin (Black Tarin) about 3000.

Peshin is the middle portion of the valley of the Lora river, Barshor being the upper and Shorawak the lower part. Peshin is inhabited by the Tor Tarin, by families of Syuda, and a few Kakar.

The Spin or White Tarin tribe reside in the valley of Zawura, and in the open plains of Tull and Chutiali. They stretch into Cutch Gandava and nearly touch the British frontier. The Tor and Spin form two factions on the Banu frontier in which all the neighbouring tribes became involved, seventeen of them being for the Tor and sixteen for the Spin faction.

Writing of the Tarin, Lieutenant-Colonel MacGregor says: 'I have given them credit for the character of general peacefulness which they hold among their neighbours. There are comparisons among thieves, and in a country like Afghanistan, where an honest man is seldom or ever met with, one can only speak comparatively; for the best of them would in a civilised country be considered as scoundrels of the blackest dye, and consigned to the common hangman.'

The Ghilji or Ghilzai is next in importance to the Daurani tribe. The names and numbers of the several clans are variously enumerated by Mount Stuart Elphinstone, Lumsden, Leech, Masson, Broadfoot, N. Campbell, Gerard, and MacGregor, and the estimates of the strength range from 35,000 to 100,000 families, with about 30,000 good fighting men. The names of the clans usually recognised are Ohtak, Thoki, Suliman Khel, Ali Khel, Sabrak, Tereki, and Kharoti. Of these the Suliman Khel is the most important, their numbers being 30,000 or 35,000. The Ghilzai inhabit the country bounded on the south by Kalat-i-Ghilzai, on the west by the Gulokh range, on the east by the Suliman range, and on the north by the Kabul river, but in many places extending beyond these boundaries.

The Ghilzai tribe occupy the principal portion of the country between Kandahar and Ghazni, and are the most numerous of the Afghan tribes. These people are also found between Farrah and Herat, and again between Kabul and Jalalabad, but in either position, being under due control, they are little heard of. The Ghilzai between Kandahar and Ghazni comprise the great families of the Ohtak, the Thoki, the Tereki, and the Andari, with their subdivisions. The Ohtak are acknowledged the principal of the Ghilzai families, and furnished the chief in the period of their supremacy.

Between A.D. 1715 and 1724, the Ghilzai were dominant under Mir Wais, his son Mir Mahmud, and relative Mir Ashraf, who was finally put down by Nadir Shah; but in that interval Isfahan had been twice taken by the Ghilzai, and Persia had lost a third of its population. When Nadir Shah overran Herat and Kandahar, he is said to have deported to Teheran 18,000 Ghilzai with their families, and to have given the Kandahar lands to his Persian followers. But in Ahmad Shah's time there was a fresh distribution, and

again another when the Kandahari brothers arrived at power.

The Khojah section are next to Jadran in the extreme east of the Ghilzai country. They murdered Colonel Herring of the 37th Bengal Native Infantry, and were punished by Captain Outram. Their women took part in that fight, handing powder and ball to their husbands, and throwing down on the assailants incessant showers of stones.

Between the years 1839 and 1842, the British Indian army was continuously engaged with the Ghilzai, and Sir John Keane, Captains Outram, Anderson, Macan, and Woodburn, Colonels Chambers, Wymer, and Sale, Generals Nott, Pollock, and M'Caskill, were at different times employed against them. The Suliman Khel attacked the army in its advance to Kabul, and when Kabul was abandoned, the Ghilzai hung upon and destroyed the retreating force. The force moved from Kabul on the 6th January 1842. It numbered then 4500 fighting men, of whom 690 were British, 970 were native cavalry, and 2840 native infantry, along with whom were 12,000 followers. Of all that body, Assistant-Surgeon William Brydon, of the Bengal army, alone reached Jalalabad, and 95 men, women, and children taken prisoners were afterwards released. From Butkak the Ghilzai surrounded them, attacking, plundering, and massacring. On the 8th January, about 3000 of the retreating force and its followers were slain at the head of Khurd Kabul defile.

On the 11th January 1842, a remnant arrived at Tezin to the number of 4500; but at Gandamak, 20 officers and 45 British soldiers, the last survivors, fell. The Ghilzai indeed drank deep of blood.

In 1848 and 1849 they were engaged against the Amir Dost Muhammad Khan, who suppressed them with an army of 25,000 veteran Abdali.

The Ghilzai, although considered and calling themselves Afghan, and, moreover, employing the Pushtu or Afghan language, are undoubtedly a mixed race. The name is evidently a modification or corruption of Khalji or Khilaji, that of the great Turki tribe, mentioned by Sharif-ud-Din in his history of Timur. The testimony of Fershta, while clearly distinguishing the Ghilzai tribes from the Afghan, also establishes the fact of their early conversion to Muhammadanism. Still there is a tradition that they were at some time Christians of the Armenian and Georgian churches. This tradition is known to the Armenians of Kabul; and they instance, as corroborating it, the practice observed by the Ghilzai of embroidering the front parts of the gowns or robes of their women and children with figures of the cross, and the custom of their housewives, who, previous to forming their dough into cakes, cross their arms over their breasts, and make the sign of the cross on their foreheads after their own manner. In the 10th century they still spoke Turki.

East of Ghazni, in the province of Zurmat, are the Suliman Khel Ghilzai, exceedingly numerous, and notorious for their habits of violence and rapine. These have no positive connection with the Thoki or other tribes, neither have they one acknowledged head, but are governed by their respective Malik, who are independent of each other. Dost Muhammad Khan reduced them to the condition of tributaries, after having destroyed a multitude of their castles.

The Ghilzæ women cannot boast of beauty, which they strive to supply by ornament. The girls from the age of eight to twenty are not much veiled, but they twist their hair, and tie it like a cake, which hangs over their forehead, and a little below their eyebrows. The centre of the lock (or hairy cake) is adorned by a gold or silver coin, which in black hair shines prettily. This is the sign of virginity amongst the Ghilzæ. The women allow their twisted locks to hang upon their ears, even as far as their arms.

Moorecroft met with a party of wandering Ghilzæ; their tents were nothing more than flimsy black blankets, stretched over forked sticks about four feet high; within, they had some more blankets, sacks, and pack-saddles; and without, a few loads of mats, ropes, and netting, for the formation of their packages; both men and women were robust, with strongly-marked features.

The Ghilzæ are both an agricultural and a pastoral people, and dwell in villages and castles, as well as in tents. They are a remarkably tall, fine race of men, with marked features, the Ohtak and Thoki peasantry being probably unsurpassed, in the mass, by any other Afghan tribe for commanding stature and strength. They are brave and warlike, but the generality of them have a sternness of disposition amounting to ferocity, and their brutal manners are not discountenanced by their chiefs. Some of the inferior Ghilzæ are so violent in their intercourse with strangers that they can scarcely be considered in the light of human beings. They irrigate by the Karez aqueducts and by wells, growing wheat, barley, lucerne, clover, and madder. The bridegroom gives a feast to the neighbours, costing a poor man about Rs. 100; and men often remain unmarried till 28 or 40 years old. When the engagement is arranged, the bridegroom is admitted to see his engagee once or twice alone at night, and, in general, without a breach of chastity. The women frequently fight by the sides of the men. The pastoral Ghilzæ are all robbers, often murdering. They are hospitable, and respect elders. The Andar Ghilzæ are expert Karez diggers.

Bar Daurani is a name sometimes applied to the Pathan tribes enclosed between the range of the Hindu Kush, the Indus, the Sal Range, and the Suliman range. It was applied to them by Ahmad Shah, and includes the Yusufzai, Utman Khel, Turkolani, Mohmand, Afridi, Orakzai, and Shinwari, also the tribes of the plains of Peshawar and those of Bangash and Khuzak.

Povindah.—A great part of the inhabitants of Arabia, Persia, Asiatic Turkey, Afghanistan, and Baluchistan consist of nomade pastoral races, who are continually on the move to and from their winter and summer quarters. But from the most ancient times there have been travelling merchants traversing these regions, carrying the products of the varied climates from one nation to another. The prophet Ezekiel, who lived B.C. 574, tells us in the 27th chapter, that the Ashurites made benches of the ivory brought from the Chittin islands; that the men of Tarshish traded with Tyre in silver, iron, tin, and lead; Javan, Tubal, and Meshech brought slaves and brass vessels; horses and mules were brought by the house of Togarmah; the men of Dedan trafficked in ivory, ebony, and precious clothes for chariots; and precious stones, spices, and gold were the

products sold in Tyre by the people of Sheba and Raamah. At the present day, the great trading race of Central Asia are the Povindah. They conduct all the traffic between British India and the Amu Darya valley. They are a pastoral race, but portions of their tribes and some of their clans carry goods to Dehli, Cawnpur, Benares, and even to Calcutta, Bombay, and the Dekhan, and return with the spices and produce of the East to Ghazni, Kalat-i-Ghilzæ, Kâbul, Kandahar, and Herat. Their chief clans are the Lohani, Nasir, Niazi, Kharoti, with subdivisions Daotani, Mian Khel, Miani, Kundi, and smaller clans, Miti, Suliman Khel, and Mashuni.

They bring to India dried fruits, drugs, spices, silks, woollens, pashminas, felts, horses, cattle, camels, and carry away British and Indian manufactures of every kind. Camels are their ordinary means of carriage. The imports and exports at the Indus ferries of the Dehra Ismail Khan district are valued at 59 lakhs, or half a million sterling.

They are wealthy, have fine horses, and can muster about 14,000 fighting men. In a region so full of wars, the perseverance with which they continue their successful enterprise merits all praise. Between Kâbul and Katiawaz, the Kafila can travel separately, but from Katiawaz to British territory they have to move for mutual protection in one great body. They are in truth soldier merchants, moving in bodies 5000 to 10,000 strong, heavily armed, under an elected chief with the title of khan, marching like an army, with advanced guard and rear guard, and flanking parties, in some parts with daily skirmishes, occasionally pitched battles, and when halting at night, posting sentries and throwing out pickets. Major Edwardes says he hardly ever saw a Povindah who had not one or more wounds on his body; and the loss of an eye, broken noses, scarred skulls, lame legs, and mutilated arms are almost as common as freckles in England.

The Kharoti section to the W. and N.W. of the Waziri have 1500 tents. Their climate in winter is very severe. Many of them are quite fair. In spring they live on milk, ghi, kooroot, and cheese.

Only militant merchants of this description could ever have made a profit out of a commerce which had to traverse difficult mountain ranges, through savage robber tribes, and the countries between them seamed with the customs lines of greedy, short-sighted chiefs. Besides the demands of the governments, they are subjected to the exaction of the officials and petty chiefs at every stage of their route, and the blackmail of the various tribes through which they pass,—the Turkoman on the Oxus, the Uzbek robbers of Muzar Sharif, the Tartars of the Dasht-i-Safed, the Hazara of Syghan and Bistut, the Wurdak between Kâbul and Ghazni, the Hotuk between Ghazni and Katiawaz, the Suliman Khel of Katiawaz, and the Waziri between them and the Indus valley. Sorely harassed, at every step losing men, horses, camels, bales of merchandise, bribing, cajoling, bullying, defying, and fighting, twice every year the caravans of these martial traders, seeking their precarious gains, battle their desolate way through the deserts of Bokhara, the defiles of the Paropamisus, the Ghilzæ plateau, and the passes of the Suliman range, across the Indus to the Panjab. Their

Kafila have to pass the Suliman mountains in one great company for mutual protection. Every year they lose a hundred or more men, and at least two per cent. of their camels, besides some hundred loads of goods. If the routes were made safe, they might make four trips annually. They leave their families at the foot of the hills, and enter British India in October, the largest body moving by Multan, and the smaller by Bahawalpur and Sirsa to Dehli, Benares, and Calcutta. They bring the wool of Kerman to Amritsar and Ludhiana, raw silks, gold and silver wire, fruits; and carry back cotton and woollen fabrics, scarfs, the gold thread of Dehli, the brocades of Benares, drugs, indigo, etc. The passes from which they emerge are the Gomal, Manjhi, Shekh Haidar, and Zarkani. They undertake the safe custody of the passes on the border of the Dehra Ismail district south of Tank limits for six months in the year, without any special considerations being granted them by the Indian Government.

The Nasir are the strongest of all the sections. They have been estimated to number from 1850 to 12,000 families. They are migratory, dwelling in summer among the Tokhi and Ohtak Ghilzæ, and moving in winter to the Derajat. They trade less than other sections, but depend on their flocks and herds for food, clothing, and tents. Their sheep and camels are numerous. They are small of stature, ugly, and black; are rude and squalid in their general appearance, and barbarous in their manners. They are one of the chief trading clans between Hindustan and Khorasan.

The Lohani section have three branches,—Daulat Khel, Pani, and Mian Khel. The first two and part of the Mian Khel have settled to agriculture. The remainder of the Mian Khel are traders, the men in summer visiting Bokhara, Samarcand, and Kābul, a guard being left to protect the women in their felt tents; in the winter they move through the Gomal pass to the Derajat, when some of them proceed to Lahore and Benares, and return in April to revisit Karabagh and Panna.

The Aka Khel are a poor tribe of the Povindah. Three of their divisions visit British territory for trade, bringing fruits and cloths. They have a considerable number of camels.

Lohani, a section of the Povindah, are descended from Nuh, son of Ismail, and are rightly called Nuhani. Nuh had two wives,—Shiri, from whom are sprung the Maorat and the Tori; Tori had five sons,—Mama, Mian, Talor, Hod, and Palakh. Mama's descendants are the Daulat Khel of Tank, Isa Khel, and Mian Khel. The Daulat Khel, agriculturists in the Dehra Ismail Khan district, form the predominant tribe in Tank, which is a semi-independent portion of the Dehra Ismail Khan district. Kati Khel, a section of Daulat Khel Lohani Povindah, also reside at Tank.

The Ali Khel are a poor branch of the great Ghilzæ tribe; a few trade on their own account, but the majority hire out their camels to the Suliman Khel, with whom they travel. A camel load is about 3½ maunds, and they charge Rs 5 to Rs. 5½ a maund from Khorasan to the Damian.

The Daotani tribe of the Povindah have nine sections or khel, viz. Badin, Hasan, Ibrahim, Madu, Nuso, Itana, Sado, Sankizai, and Usmanzai. They live at Wana, and come down in three Keri after

the Kharoti. They bring silk, pashm, carpets, charas, and are one of the richest of the Povindah tribes.

The Kharoti tribe in Afghanistan inhabit the district of Karabagh and the table-lands of Dur Tselæ, Saroba, and Sar-Afzai on the E. borders of Khorasan; their khel are three,—Zadu, I, and Adu, with numerous subdivisions, about 15,000 to 20,000 souls. The Povindah and agricultural Kharoti are of the same clan; the Povindah Kharoti are Ghilzæ. They are friendly with the Lohani and Ghilzæ Povindah, with the exception of the Suliman Khel, with whom they have an old and very bitter blood feud; they are at enmity with the Waziri.

Purmuli, or Fermuli, or Hurmuli, a brave and warlike race, about 8000 in number, residing south of the Kābul river near Orglum in the Kharoti country, and to the west of Kābul. They carry on an unceasing hostility with the Kharoti tribes around them. Some are soldiers in the Amir's army, and some engage in trade. They occupy the lands at the head of the Waziri country.

The Pashai race, in Afghanistan, were formerly very numerous, but are now greatly reduced, their remnants being found in the districts of Mundal, Chitela, Parena, Koondee, Seva Koolman, Nijrao, Lughman, Koh Karinj, Kunar, Bajawar. The Panjsher people are probably Pashai, though calling themselves Tajak. They and the Nijrao inhabitants speak the Pashai dialect. The Safi of Taghai and the Dara Mir are also probably Pashai. The Pashai are mentioned repeatedly by Lieut. Leech as one of the most numerous tribes in the Panjsher valley and adjoining passes. These are supposed to be Muhammadans, but as the name is mentioned also by Elphinstone as that of one of the Kafir tribes, part of them in the mountains may have retained their heathenism and independence.

The Safi, with about 2800 fighting men between Pashut and Shewa, occupy the north side of the hills on the left bank of the Kunar river. The Safi understand Pukhto, but speak the Pashai. They inhabit the valley of Dara Nur, the hills to the north of Jalalabad, and between that division and the Kafir country, also the valleys of Barhot and Daminj to the west of Dara Nur. They are a straightforward, manly race, with florid complexion, light eyes and hair. They have bee-hives, and make wine and vinegar.

The Safi occupy Dara Nur, Dara Mazar, Dara Pech, and the valleys opening on the Khonar river, and in a district called Surkh Khanbar, south of Bajawar. In Baber's time they were Kafirs. They were expelled by the Ghilzæ from the lands to the south of Taghow, and between Kābul and Jalalabad. Nadir Shah cultivated a friendship with them.

South of the Safi, at Bahi, the first march from Goshter, on the Jalalabad river towards Bajawar, are a people called Yeghani, who consider themselves Afghans, but are probably converted Kafir, for they speak a dialect which no Afghan can understand.

The Buruki race, who claim to be of Arab origin, occupy Logur and Butkak, in the Ghilzæ portion of the Afghan country, and are said to have been settled there, south of the Kābul river, by the Sultan Mahmud in the 11th century. Their

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number is about 8000 families, but they arrange themselves into tribes with chiefs. They are good soldiers.

The Jaji tribe dwell in the valleys of the Hariab and its tributaries. They have about 700 or 800 families. They are much at feud with one another; each house is separate, and in the form of a square. They form a circle for their wild war-dance.

The Mehrani tribe inhabit the slopes of the Takht-i-Suliman next to the Shirani; they are great marauders.

The Kakar inhabit the extreme S.E. corner of Afghanistan. They claim to be descended from a man named Sharif-ud-Din, whom Mahomed converted and gave the name of Abdur Rashid, with the title of Pret Khan. He is said to have had five sons,—Shirani, Tarin, Miuni, Barechi, and Umar-ud-Din, all founders of clans. From the extreme antiquity of the Kakar clan it has branched largely, and the Arabi Khel or race of Mulla, the Tacmuni of Ghor, the Firoz Kohi Hazara, the Kayani tribe of Seistan, the Utman Khel, and the Gakar, all claim connection with them. The Kayani tribe are commonly called Baluch, but they acknowledge themselves and are recognised descendants from the Saugor Khel Kakars. They are scattered all over Afghanistan; a branch is in Kashmir on the banks of the Jhelum, and the asafoetida trade of Herat is in their hands. They number 14,000 to 20,000 fighting men, viz.:

Jalazai, 2000	Kahizai, 1000
Musa Khel, 3000	Hamzazai, 1100
Kadizai, 2000	Shahozai, Alizai, and
Usman Khel, 200	Tenizai, 900
Abdulazai, 2000	Khidarzai and others, 200

The Kakar country in the headwaters of the Lora is wild and inaccessible. It forms a square of about 180 miles between the Atchakzai country, the Spin Tarin, the Suliman range, and Baluchistan. But Kakars named Casia occupy in part the valley of Shal. The Punni clan, in Sewi and Sewistan, is Kakar.

The Jalazai section number only about 110 fighting men. The Alizai clan is agricultural and pastoral, and are said to number 10,000 fighting men. They are peaceably inclined, and every winter large numbers come to Dehra Ghazi Khan to labour as wood and grass cutters and road-makers.

The Musa Khel branch are in the hills beyond the Baluch, to the west of Dehra Ghazi Khan district and the Kala Roh range, three or four days' journey from Mangrota or Vihowa. Their sections are Balel, Umas, and Lahar. They could assemble 3000 fighting men.

The Shahozai, said to be an offshoot of the Kakars, number 200 fighting men.

The Bar Namai Kakar are about twenty miles south-west of Mekhtar, and the Khojah are an offshoot from them.

Among the widely-distributed Kakar race there are many differences in manners and in personal appearance. At the time of Mahmud of Ghazni, a warlike tribe of Ghakkar, Gukkar or Kahkar were in the Salt Range or Jhow mountains between the Indus and Behut (Hydaspes), and at an early period of their history they would seem to have been given to infanticide. They are supposed to be the descendants of the mountaineers whose chief, Ambisaces, sent ambassadors with

presents to Alexander. Baber writes the name Guker, but it is also written Ghuka and Khaka.

The Khostwal is a Pathan tribe occupying the valley of Khost in Afghanistan, for 40 miles along the Shamil or Kheti river. Their five divisions or Khel are the Ismail, Matun, Manduzai, Shamal, and Lakan, and they number 6000 to 8000 souls.

The Abdul Rahman Khel, of Khost, inhabit the Matun district of that valley, also, therefore, called Matuni. They are a branch of the Karani clan, and are also Mamuri. They number about 1000 fighting men, and are mostly agricultural.

The Makbal is a quiet, peaceable tribe living to the north of the Mangal and west of the Jaji. Some of them dwell in the Khost valley.

Vanicha, a Pathan tribe of 300 fighting men. Their Zargwal section dwell near Bahian, and the Khorasani in the hills bordering Khorasan.

The Tajak are the aborigines of the country, and are not Afghans. Alexander probably found them there, as fire-worshippers, speaking Sanskrit or Pehlevi. They form the industrial part of the population of the khanates of Uzbek, Khiva, Bokhara, Khokand, and Kashgaria, also in Farghana, in Khorasan and in Baluchistan, all over Afghanistan from Jalalabad to Herat, and from Kandahar to Balkh, also in Persia, Turkestan east and west, scattered and unconnected, mixed with the Uzbaks, Afghans, Persians, Baluch, and Brahui, but with independent governments in in Darwaz, Karatagin, Vakhani, and Badakhshan. They seem to have been the aboriginal inhabitants of all these countries, and to have been pushed aside by more martial, advancing, and conquering races. They speak Persian, and in Turkestan and Afghanistan, Tajak and Parsivan are synonymous terms; but in the west they are also called Sart. Tausik or Tausjik is the name applied to the Arabs in all Pehlevi writings; but they themselves at present derive their name from Taj, a crown or head ornament. They are supposed to be of the same race as those of Kafiristan, Chitral, Shaghnani, and Roshan. The Tajak are a handsome race, athletic, tall, with fair complexions, and lively, sociable temperaments. They wear the costume and follow the customs of the races amongst whom they are dwelling; but they are of settled habits, mostly agriculturists, or engaged in all the industries of towns. They are sunni Muhammadans, and are quiet, orderly, frugal, and industrious people. Some of them, under the term Turk, serve in the army of the Amir of Kabul and in the Panjab Irregular Force. They are, next to the Afghans, the most powerful race in that country, and compose the principal part of the population round Kabul, Kandahar, Herat, Balkh, the Kohistan of Kabul, Chitral, Gilgit, Shaghnani, Badakhshan, Karatagin, Vakhani, Darwaz, the small states north of the Hindu Kush, of Doshi, Khinjan, Indarab, Khost, Firing, and Versukh; the Baraki of Logar, the Fermuli of Urghun, the Sardehi of Zurmet, and the Shahregi and Sarbandi of Seistan are Tajaks. The Baraki inhabit Barak, Logar, and part of Butkak, mixed with Ghilzai. In 1809 they had 8000 families. The Logar branch speak Persian, those of Butkak speak a language called Baraki. They are more respected than other Tajaks. The river of the Panjshir valley in Afghanistan rises on the south of the Hindu Kush in the Khawak pass. The orchards and mulberry plantations furnish the staple

support of its inhabitants. The Panjsheri, like the rest of the Kohistani, are Tajaks. They are sunni Muhammadans and bigoted. They form peace leagues with the Kafirs, exchanging hostages. They have been independent since the time of Timur, but every man is for himself, and the whole valley is filled with turbulence and strife. They could assemble 10,000 men. They are good soldiers.

The Tajak in the Surkh Rud district of Jalalabad division have 2827 houses. The Parsivan who came with the army of Nadir Shah and settled in towns, are merchants and in various trades; in villages they are shepherds and agriculturists.

Kazzilbash formed part of one or more of the seven Turkish tribes that embraced the party of Shah Ismail, the founder of the Saffavi dynasty. This sovereign, to distinguish them from the others, gave them a kind of red cap, hence their name of 'Red head,' Kazzilbash. The seven tribes were Oustajalu, Chamlu, Nikalu, Baharlu, Zoolkaddar, Kajar, and Afshar. When Nadir Shah marched towards Delhi, he had twelve thousand fighting Kazzilbash with him. When he quitted that city, on his return, he left behind him three hundred of these, who, with other troops, were directed to bring away his treasure, and follow him. They passed through Kābul; but when within two days' march of Kandahar they heard of his death, and a few days afterwards, Ahmad, Nadir's lieutenant, arrived, attended by five or six hundred Daurani; he seized the treasure, and took the Kazzilbash into his service, and his kind treatment of them induced others to come from the neighbourhood of Tābrez, Mashid, Kirman, and Shiraz, in Persia, where the true Kazzilbash exercise the profession of horse-breeders, shepherds, and cultivators. There are now perhaps about ten thousand Kazzilbash in the city of Kābul, who are ever ready to serve as mercenaries. Their leaders are by far the most wealthy, the most intelligent, and the most influential men at Kābul. Under the Amirs of Kābul they have served as body-guards, and still retain their own language. They are known in that city as Ghulam Khani or Ghulam-i-Shah, lit. household or royal slaves. They have three sections, the Jawansher, Afshar, and Morad Khani. The Jawansher are of Turk descent from Shisha, have several sections, and form the principal part of the Kazzilbash.

The Kazzilbash are good horsemen; they constitute the bulk of the cavalry and artillery of the Amir of Kābul. They are also found in the Indian army irregular cavalry. In Afghanistan they are also merchants, petty traders, scribes, physicians, secretaries, and stewards. They speak Persian and Turki.

The Jat in Afghanistan, about 300,000 in number, are Sunni Muhammadans; they are mostly very poor,—farm servants, barbers, musicians, and sweepers.

The Hindki are Hindus of the Khatri class, residing all over Afghanistan, even amongst the wildest tribes, who could not get on without them. They pay a capitation tax, are not allowed the open worship of their religion, nor to give evidence in a court of justice, nor to appear on horseback. The Paranche Hindki are found in the Panjsher valley at the head of the Swat valley,

also in the Bannu district in British territory, in Peshawur, Kohat, and in the Hazara country. They are traders, and of recognised integrity.

Arabs have colonies in the Jalalabad district, Bajawar, Peshawur, and Pughman. The Jalalabad Arabs are well conducted, they are pastoral and agricultural. They speak Persian, and believe that their ancestors came with Timur.

Jews are found throughout the country in small numbers.

A few Baluch tribes pasture their flocks and herds in the southern parts.

Kawal (Qu. Khawal) are a tribe of thieves and fortune-tellers, who wander about the Pughman mountains.

The Sadu tribe, in the Pughman hills, much resemble gipsies in habits and mode of life; they are fortune-tellers and thieves.

The Afghan are all Muhammadans, having been converted to this creed within half a century from the first promulgation of that religion. The majority of the tribes are of the sunni sect. The shiah sectarians are the Badakhshi, Vaki, Seistani, Tajak, Kazzilbash, Hazara, Turi, Bangash. Some of the Orakzai, Dawari, Khostwal, Jaji, Chitrali, and some Kohistani.

The Parsivan and Aimak, who are subject to the Afghans, profess Muhammadanism. Besides the two sects just mentioned, some are of the Ali Ilahi schism.

The government of the tribes is a democracy, their representation and self-government being by their Jirgah and Ulus, but, like most rude people, no man's nationality extends beyond his own clan.

The mother of a betrothed girl connives at the engaged couple meeting; this is called Nam-zad-bazi, literally betrothed happiness.

The Afghan are the only people of Central Asia who in comparatively recent times have come to reside to any considerable extent in British India. They have never, however, migrated in large bodies, but have accompanied the Muhammadan rulers of India, all of whom have entered from Afghanistan, and brought bodies of the Afghan with them. They are known in India by themselves and others by the name of Pathan. Some of these have settled in many places throughout Northern India and in some parts of the south, as far south as Hyderabad, Kurnool, and Cuddapah, some of them in villages, where they own and cultivate the soil. These have been in considerable numbers in the native army of British India, and particularly in the corps of irregular cavalry, and in Northern India, in the civil service of Government. A few Pathan settlements are found in the Panjab and about Delhi, and they are numerous in the Upper Doab and Rohilkhand. Pathan principalities, jaghirs, and families are met with all over India, and the Begum of Bhopal is of Afghan descent.—*Bunsen; Calcutta Review; Campbell; Chesney; Elphinstone's Hist. of Caubul; Ferrier's Hist. of the Afghans; Latham's Ethnology; Mohun Lal's Travels; Colonel MacGregor's High Asia; Peschel; Tod's Rajasthan.*

BALUCHISTAN, as known to Europeans, is partly Persian territory, and in part under the rule of the Khan of Kalat. Its territorial divisions have been already noticed under that heading; what remains to be described here are the multitudinous races who have found refuge in its

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mountain valleys. According to the most recent authorities, it has an area of 140,000 square miles; 60,000 are under the Shah of Persia, in the Sarhad and Baluch, two mountain plateaux, and 80,000 under the Khan of Kalat, in the provinces of Saharawan, Jhalawan, Cutch Gandava or Cutchi, Las, and Makran.

The territorial boundary between Brahui or Kalat Baluchistan and Persian Baluchistan has been defined; but the inhabitants, particularly those in Makran and the Kohistan, are occupants of the two divisions.

Mr. Masson arranged the portion of Baluchistan subject to the Khan of Kalat into four subdivisions:—

Western.	Maritime.	Central.	Eastern.
Nushki. Kharan. Mushki. Panjghur. Kej. Kolwah. Jhow.	Las. Hormara. Persani.	Saharawan. Kalat. Jhalawan.	Cutch Gandava. Harand on the Indus. Dajil on the Indus.

The people are partly pastoral and nomade, partly dwellers in towns, and, as indicated by their physical appearance, are of widely different races, who have pushed or been pushed forwards from the S., the W., and the N.W., into their present sites. In the khanate of confederate tribes are the Baluch tribes proper, the Rind, the Brahui, the Lumri, the Dehwar of the capital, the Jet or Jat of Cutch Gandava, the Babi, Arab races occupying the maritime provinces, the Afghans of Shal, and the Hindu residents of villages.

Baluch traditions trace their origin to Aleppo in Syria, from which they emigrated, passing through Persia to Cutchi, Makran, and Seistan. They entered Sind through the Bolan pass, and then broke into two factions, Lishari and Rind, and the Lishari successfully disputed the rights to the water of the Jhool river.

Dr. Cooke was inclined to the opinion that the Brahui were Tartar mountaineers who had gained a footing in the country, ultimately becoming the ruling race; and that the Baluch came from the westward, but whether they were Seljuk Tartars or Arabs from Aleppo, he thinks is a matter of doubt. He considers the Hindus to have been the first colonizers of the upper part of the Brahui mountains, and that the Brahui gradually settled amongst them; that Sehwa, a Hindu raja, called in the aid of these mountain shepherds against a horde of depredators from the western parts of Multan, Shikarpur, and Upper Sind; and that the Brahui, having defeated and driven off these invaders, seized the government for themselves,—a chief of the name of Kumbhar becoming Khan of Kalat, of whom the present khan is a lineal descendant.

The other race, the Baluch, he says, ascribe their origin to the earliest Muhammadan invader of Persia, and are very desirous of being supposed to be of Arab extraction. They spurn the idea that they are derived from one stock with the Afghans. The affinity of the Baluchiki to the Persian language favours their tradition that they came from the westward; to support which, also, we see that the majority of the Baluch still dwell on the western frontier.

Sir Henry Rawlinson says the Persians regard the Baluch as descended from Belus, king of

Babylon. It has been said that Baluchistan was first applied to the territory by Nadir Shah; but Ibn Haukal, in the 10th century? says, 'The Baloujes are in the desert of Mount Kefes, and Kefes, in the Parsi language, is Konje, and they call these two people Koujes and Baloujes.'

The Brahui are the dominant race. From their physical appearance, their language, and the sites which they occupy, together with their traditions, they appear to have been a nation of Tartar mountaineers, who settled at a very early period in the southern parts of Asia, where for many centuries they lived an ambulatory life in khels or societies, headed and governed by their own chiefs and laws; and at length they became incorporated, and obtained their present footing at Kalat and throughout Baluchistan. Their pursuits and ways of domestic life afford reason for believing that they were originally mountaineers; and some amongst them affirm that the very name demonstrates this by its signification, being a compound of an affix Boan, and Roh, a word said to mean a hill. This tradition is supported by the collateral evidence of the Baluch being called in one quarter of the country Narui, 'lowlanders,' i.e. literally 'not hillmen,' a name they received from the Brahui when they came amongst them, and evinced a preference for the champaign districts.

The Khan of Kalat's dominions extend from Shal or Quetta in the N. southwards to the sea on the coast of Makran, and from the frontier of Persia beyond Kharan and Panjgur on the W. eastward to British Sind, a length and breadth of about 400 miles. This territory, varied in character to no ordinary degree, consists of lofty, rugged table-land and level ground, and their climates exhibit the severest heat and most intense cold. When the plains of Cutchi are intolerable in the month of May, by reason of the intense heat, dust-storms, and poisonous winds, the weather about Quetta and Mustung resembles an English spring-time.

A mountainous table-land, running north and south, comprises the provinces of Saharawan, Jhalawan, and Las. It extends from the Afghan mountains N. of Quetta southwards to Cape Monze, or from lat. 40° to 25° N., a length of 340 miles. In breadth it extends from the level plains of Cutchi eastward, to Nushki on the borders of the Seistan desert westward, extending thus about 150 miles, widest about the centre, but it gradually narrows southwards until, at Cape Monze, the range is only a few miles in width. The height also varies. The greatest altitude is attained at Kalat, about 7000 feet, where the climate is European; southward it rapidly declines, until in the province of Las the elevation is little above that of Sind. In this mountain range here and there are long and meandering valleys, but it is the natural boundary of Western India.

The Kohistan of Baluchistan is the part lying to the westward. On its N.E. and W. it has sandy deserts, and on its south are various districts of Makran. Its principal mountains are those called the Sarhad between lat. 29° and 30° N., visible from a distance of 80 or 90 miles. In several places are brooks of liquid salt; pools of water covered with naphtha, sulphur, muriate of ammonia, and hot springs. It is occupied ex-

clusively by Brahui, in a number of petty republics.

The Badozai and Bati tribes of Baluch inhabit the district of Past-i-koh west of Sibi in this Kohistan.

The Memaseni tribe of Seistan and Luristan, west by north from Shiraz, occupy still farther west in the valley of Mushki. They are the bravest but the most savage of the tribes, and lead a wild, disorderly life, frequently at feud with their neighbours. They are the powerful tribe encountered by Alexander in Upper Bactriana.

Bashkurd is the most western district of the Kohistan; it is extremely mountainous, and is separated by a desert from the Persian province of Nurmanshahr. It is occupied by a tribe of Kurds who have advanced out of Luristan. They are pastoral, and prefer the uplands. There is a hot spring at Basman, a hamlet in the Kohistan.

The Baluch and Brahui take their tribal names from the chiefs under whom they serve, the district or country to which they belong, or the traditions as to whence they derive their descent. Between the numerous clans, blood-fends have at times been long continued. The authority of the Khan is acknowledged by the greater portion of the tribes and races in Baluchistan, and the khanate has treaties with British India. Quetta is now (1883) garrisoned by a British force.

Pottinger, writing early in the 19th century, enumerated 74 principal tribes of Brahui, and gave 106,760 as their fighting strength; but he added that he could have given twice as many more names.

The more important of the Baluch, Brahui, and Afghan tribes in the khanate occupy the following districts:—

Nusherwani (Baluch) in Kharan and Washak and partly in Maskai.

Mirwari (Brahui) in Maskai.

Gitchki (Brahui) in Panchgur and Kej.

Lumri or Numri in Las. They are connected by blood with the Batti of Jeyaulmir, and trace their ancestors to Samar, the founder of Samarcand.

Kassi (Afghan) in Shal.

Minghal tribes and Bizanju, Zahri, Hawlarani, Kaidrani, and Kambarani occupy the Jhalawan districts of Wad, Nal, Sohrab, Zahri, and Kozdar.

Raisani, Sherwani, and Bangalzai (Brahui) in Mustang. Rakshani (Baluch? Brahui?) in Nushki.

Kalat by Dehwar, Brahui, Babi, Hindu, Afghan, and slaves. The Brahui is the dominant tribe.

Rind (Baluch) and Jat are in Cutch Gandava, with Rind and Bugti (Rind) in the hills beyond. Garchani (Rind) occupy Harand.

Baluch inhabit the hills to the W. of the N.W. British frontier from the Vihova pass on the N. to the extreme limits of Jacobabad on the south and west. The khanate tribes own the authority only of their respective chiefs, but several of them occupy partly khanate and partly British territory.

Major John Jacob, C.B., writing in the year 1854, gives the following three lists of—

i. Tribes residing beyond British territory, and de facto independent of any other state.

Khetrani.	Kujjuk and	Bugti	} Predatory hill tribes.
Lashari	Barozhi of	and	
Gurchani.	Sibi.	Mari.	

ii. The Border Baluch, who are partly within and partly without British territory, are as under:

Mazari.	Chandia.	Umrani.	Nizamani.
Burdi.	Jettui.	Khyhiri.	Kalhiri.
Dumki.	Jamali.	Jat.	Khanavi.
Jakrani.	Kosa.	Mbar.	

iii. Border Tribes living within British territory. These are the Mazari, Burdi, Khosa, Jemali, Jettui, Dumki, Jakrani, and others.

Baluch have no written tongue, but Persian is used, and in their traditions they claim to be Arabs who left Aleppo after the death of Imam Husain, and to have settled in Kirman and afterwards in Makran, while subsequently some of them went to Kalat and Khorasan and other places.

The great Rind tribes are subdivided into 44 branches. Their traditions affirm them to have emigrated ages ago from Damascus and Aleppo. Their language is the Jatki, in common with that of the other inhabitants of Cutch Gandava, and Mard-i-Rind means a brave man. The Rind of Cutch Gandava are of the Utanzai division.

The Utanzai dwell at Suran; the Dumki and Jakrani dwell at Lehri; the Doda Mari at Kahan; the Bugti, in the hills east of Lehrat, Sing Saloh, and Teriki; the Homarari dwell at Tambu; the Jamali dwell at Rojan. The Dumki, Jakrani, Bugti, and Doda Mari were distinguished by their predatory habits. They indulged these in attacks on the British armies west of the Indus. The Mari tribe inhabit the eastern hills of Cutch Gandava, and were notorious for their lawless habits and frequent inroads on the plains. A peaceful and submissive portion of the tribe are in the hills west of the province below Jell. A large portion are at Adam Mari, on the S.E. frontier of Sind. They and the Maghazzi seem to have emigrated from Makran to Cutch Gandava at different periods, and to have become incorporated with the Jat cultivators.

The following minor Rind tribes reside in the N.E. hills of Saharawan:—Kallui at Lup; Kuchik at Kirta; Pushh at Johan; Mandarari at Rodbar; and Puzh at Kajuri.

The Rind on the western banks of the Indus are of two great tribes, the Gurchani, who inhabit Harand, and south of these the predatory but nearly independent Mazari tribe. Their subdivisions are—

A. Dwelling in the hilly region N.W. of Cutchi.

Bugti.	Gurchani.	Lurdi.	Mazari.
Chachri.	Lashari.	Mari.	Mundaistri.
Dirishik.			

B. Dwelling in Cutchi.

Boledi.	Ghulambulk.	Kharani.	Pogh.
Changia.	Jalambani.	Kosa.	Puzh.
Dinari.	Jatui.	Nusherwani.	Rindani.
Doanki.	Kalui.	Omrani.	Utanzai.
Dumki.			

The Rind section of Baluch are in small groups or singly all over Sind, though more numerous in the north near Jacobabad, or southwards in the Thur and Parkur districts. Rind, under Chakur, attached themselves to the emperor Humayun's fortunes. They got a grant of land in the Bari Doab, and settled at Sat-gharra, on the banks of the Sutlej near Gogaira, and are still there, though not so designated. Some Baluch settled in the N.W. of India, to as far as Delhi, where they are scattered about in various capacities, and are often camel-drivers. They are large, powerful, swarthy men. They serve as mercenary soldiers in Arabia; and latterly, in Bombay, they became labourers at the harbour and on the quays.

The Maghazzi have only four families, the Butani at Jell being the chief. They are the deadly enemies of the Rind, but are probably of the same race. The Maghazzi are subdivided

into four principal families or clans, of which the Butani of Jell are the most illustrious, and gave the chief or sirdar to the whole. They boast of being able to muster 2000 fighting men; and between them and the Kind a blood feud long existed. The Maghazzi and Kind are alike addicted to the use of ardent spirits, opium, and bang.

The Baluch are in tribes or tomanas, each under a hereditary tomandar. The tomanas are subdivided into clans or para, each clan with a hereditary Makadam or headman. Each clan has sections or pali. They are a hardy, martial race, truthful and faithful to their engagements. They dismount and fight on foot with sword and shield. They are Muhammadans of the Sunni sect, but are not bigoted nor fanatical, and have no hatred to the British on religious grounds. Their courage is open and stern; 700 Bugti refused to surrender to Colonel Merewether's horsemen, though escape was hopeless, but allowed themselves to be shot down till two-thirds had fallen. They are averse to labour and to all instruction, considering it an indignity to learn to read or write. They are averse to regular service or to wear uniform. In their internal wars and blood feuds they never molest women or children, though they carry on their contests with the most implacable enmity.

The lads who have not put on trousers are regarded as children. Their women move fearlessly about the hills, gathering the fronds of the dwarf palm, or collecting fullers' earth. Widows are remarried to their deceased husband's brother. The men wear their beards, and have bushy whiskers. Their turban is of cloth twisted like a rope; they have a sort of shirt reaching to the knees and plaited at the waist behind, with loose trousers, and a white sheet as a plaid. The ornaments of the women are necklaces (hassi) a torque of stiff solid metal; a necklet (chamkali, a string of twisted silk with pointed gold beads), armlets, bracelets, and anklets.

Their houses are mean, their flocks are small. They are bad riders, though they have a good breed of mares, 13·2 to 14·1 in height, well built, wiry, and hardy, able to carry their rider 50 to 70 miles, with his bedding, food for man and horse, with matchlock,—in all about 13 stone; they are never shod.

Their arms are sword and shield and matchlock. They are hardy, endure severe privation. They have blood feuds,—Khun-bawur, satisfaction in blood.

The Narui section of Baluch are a tall, handsome, active race, with good features and expressive countenances, not possessing great physical strength, but inured to changes of climate and season, and accustomed to undergo every kind of hardship and fatigue. They fight with great gallantry, fearless of death, only requiring a leader to direct their impetuous valour. They are the most savage and predatory of the Baluch. The Kind and Maghazzi Baluch resemble the Narui Baluch in size and stature, and, like them, have good features and expressive countenances, but are less able to support hardships and labour. They are of a darker colour than the Narui. They are hospitable. They are almost pastoral; usually reside in (ghidan) tents of black felt or blanket, stretched over a framework of tamarisk (guz). The

Narui prefer mud houses to tents. The Baluch are indolent, and only rouse themselves to some favourite amusements. They are sober, using flesh meat, wheat, and barley, cakes, rice, dates, cheese, sweet and sour milk, and soup made of dal or peas, seasoned with pepper. The Narui principally inhabit that portion of Baluchistan which lies to the westward of the desert, and there are likewise clans or khe! of them at Nusbki and in Seistan.

The sections Kind and Maghazzi are settled in Cutch Gandava, to which fertile plain they have migrated at different periods from the province of Makran, and have become incorporated with the Jat, or cultivators of the soil, as the subjects of the Khan of Kalat; a few of these likewise reside in the hills to the N.E. of Cutch Gandava, and on the skirts of the deserts north of Kalat. The Baluch, in all the east of Baluchistan, are but the upper stratum of the population; and there, as also in Seistan and Cutch Gandava, the Jat race form the greatest portion of the agricultural population.

Baluch tribes think much of good blood and the claims of long descent. Baluch mothers, like those of the Armenians, Hebrews, Chinese, and Afghans, see the proofs of their daughter's marriage.

Baluch have a code of honour, to which they scrupulously adhere, and have far more nobility of character and manliness of disposition than Afghans. The Afghans swore not to molest British troops when retiring from Kabul, nevertheless destroyed the brigade. The Baluch swore to keep faith with Captain Browne and his garrison in Kalun, and escorted them safely to the plains, though quite at their mercy and dependent on them even for water. The Baluch closes with his enemy in the fight, sword and shield in hand; the Afghan engages with matchlock, firing from a distance, if possible under cover, and seldom closing with his enemy.

Baluch women generally wear the gagh-gho, a long shift resembling an English night-shirt, but opening behind between the shoulders, and with half arms. It is usually made of red or white stuff, and reaches almost down to the ankles. Red is the fashionable colour, and elaborately worked at the breast.

The men wear their hair long and flowing over the shoulders, whilst a luxuriant beard falls over the breast. The women tie their hair in a knot behind, brushing it smooth in front, and keeping it in place by a fixture. The colour of the hair is frequently brown or red.

Baluchistan grows wheat, barley, millet, and rice, but mutton and milk preparations are the staple articles of food; asafoetida is largely used.

Jaloh is a scorching hot wind of the Baluchistan desert. It is frequent in the eastern low-lying province of Cutch Gandava or Cutchi; it blows also in the sandy deserts bordering on Southern Afghanistan, and is often fatal to animal life.

Lead mines are worked at Kappar or Sekran in Central Baluchistan.

The Brahui are confined to the mountain districts, in which also are tribes from several sources; for instance, Jhalawan has Rajput descendants, the Boledi is of Arab descent, and the Kamburani claim to be Abyssinian.

The typical Brahui are certain tribes in Saharawan and Jhalawan. They have, both in feature-

and speech, indications of a Mongoloid or Turanian origin. They are hardy, often migratory. Their political chief is the Khan of Kalat. They are Sunni Muhammadans.

The more unsettled and wandering Brahui reside in one part of the country during summer, and migrate for the winter season. They likewise change their immediate place of resort many times, in search of pasturage for their flocks,—a practice rare among the Baluch tribes. They differ so much from the Baluch in external appearance, that it is almost impossible to mistake one for the other. The Brahui, instead of the tall figure, long visage, and raised features of their fellow-countrymen, are stout and squat, have short, thick bones, with round faces and flat lineaments. The title Kamburani is a general one for all the Brahui. The Kamburani are subdivided into distinct gradations of rank, called Ahmadzai and Khani. The first supplies the khan, and the Khani are of the secondary rank of chiefs; while the Kamburani include all the remainder of the tribe, though in common use is applicable to the whole body. They receive wives from, but do not marry their daughters into, other tribes.

Brahui are found throughout Baluchistan, but chiefly occupy the mountainous regions of Jhalawan and Saharawan, while Kalat, the capital, is their headquarters. They are hardly to be surpassed in activity, strength, and hardiness, being alike inured to the cold of the mountains of Baluchistan and to the heat of Cutchi. The women of the Bizarju tribe, and those of the Nichari near Kalat, are esteemed very handsome; but the exposure to which they are subjected during their migrations soon bronzes the face, and they acquire a hardy, masculine appearance. At the commencement of the winter months, all migrate to the plains, and many leave the hill country as early as the middle of September. On a march they sustain incredible labour.

The Gurganani Brahui take their name from the Persian Gurg, a wolf.

Kamburani Brahui are estimated to have 1000 fighting men. They are supposed to have come from Abyssinia, Kambur in Baluchi meaning an Abyssinian. It is said also to mean a tortoise.

Brahui and Baluch are equally hospitable, but the Brahui are the more quiet and industrious race, with habits averse to the rapine and violence to which the Baluch tribes are addicted. In personal bravery and endurance of privations and hardships, the Brahui are esteemed superior to all the neighbouring races. Their gratitude is lasting, and their fidelity conspicuous. They are mild and inoffensive in manner, though uncouth and uncivilised. Their women are not secluded.

The tribes, especially the Brahui mountaineers, reside in tomans, or collections of tents. These tents are made of goats' hair, black or striped; the furniture is very simple,—a few metal cooking-pots, a stone hand-mill, and some rough carpets and rugs, with a distaff for spinning wool, and a hookah, are all that are usually found in a Brahui tent. That of the chief may perhaps be better furnished, and he is richer than his neighbours in flocks and herds. The dress of the lower orders is made up of a long tunic, trousers loose at the feet, and a black or brown greatcoat or cloak, usually of felt, kamrband, and sandals. They wear a small cap, either fitting tight to the out-

line of the head, or dome-shaped, with a tassel on the top. Those of the higher classes are elaborately ornamented with gold thread. A few wear turbans; and the Baluch have them preposterously large, of white muslin. The higher classes are somewhat better dressed, and carry loongees or scarfs, which they throw around their shoulders in exactly the same manner as a Scotchman wears his plaid, and as the ancient Irish wore them long ages ago.

Saharawan province, in Central Baluchistan, is about 10,000 square miles. The population does not exceed 50,000. This elevated plateau is the more northern of the Baluch confederate provinces, and runs with the Afghan districts of Peshin and Toba, and is separated on the east by a range of hills from Dadar and Cutch Gandava. It has only the Bolan river and a few rivulets, but the climate is cool, and the rains ensure good grain harvests. Quetta, Kot, or Shal is one of its districts, and snow lies there for two months of the year. The population consists of the Kassi (Kassye) tribe of Afghans, who claim affinity with the Safi clans; but in spring and summer numerous Brahui tomans range over its plains. Its capital, called Shal by the Baluch, by the Afghan is called Quetta, an equivalent for 'kot' or fort, sometimes Shal-Kot.

The Shal valley was ceded to Nasir Khan of Kalat by Ahmad Shah, the first Daurani sovereign. It has many small divisions and villages. Its capital, Shal or Quetta, is very unhealthy from July to September.

Part of the Sherwani Brahui dwell in Shal. The Sherwani occupy also exclusively Khad and Kishna, but reside with other tribes in Shal and Mustung. They take their name from their belief that they came from Sherwan on the Caspian.

Mustung has a healthy climate and fertile soil. It contains no Afghans, the fixed inhabitants are Dehwar, mixed with the Raisani, Sherwani, Mahmud Shahi, Bangal-zai, Lari, and Sirphera tribes of Brahui.

The Raisani, the most respectable of the Saharawan tribes (from Rais, Arabic for ruler), are able to raise 500 fighting men. The Raisani furnish the chief of Saharawan, whose place on all state occasions is on the right of the Khan of Kalat, the chief of Jhalawan being on the left. They are traders, horse-dealers.

The Lari Brahui occupy the valley of Nermuk in Saharawan, but reside also at Mustung and Shal, with other tribes.

Sirphera, literally head-shearers, dwell in Saharawan and Cutchi. They reside in summer in Gurchani, and during winter in Cutch Gandava. Pliny mentions the Saraparæ near the Oxus.

Mangachar has a few dispersed hamlets. It is well irrigated with canals, and the whole plain is intersected with dams to preserve the rain. The tomans are scattered over the plain. Many brood mares are kept. It is separated from Mustung by a lengthened valley termed Khad, in which the Sherwani tribe of Brahui dwell. The Brahui tribes on the east border with the Mandawari, Kuchik, and Puzh Rind tribes and the Ghazghi Brahui, adjacent to Cutch Gandava. The Langhao are in Mangachar.

Dusht-i-be-Daulat belongs to the Kurd Brahui tribes. It is in the northern part of Saharawan and west of the Bolan Hills, and is about 15 miles

in length and breadth. In spring it is clothed with lovely flowers and grasses, and is then covered with the tomans of the Kurd, who retire to Merv after the harvest of autumn, and then predatory bands of Khaka roam over the ground. The Kurd possess also Tikari in Cutch Gandava. Their sections are the Made-zai, Shadan-zai, Zirdad-zai, Shadi-zai, and Massutari. A pastoral tribe of Kurd occupy the Kohistan.

The Kharan province, in which lie two small towns, is occupied by a Rind tribe of Persian origin, called the Nusherwani, of whom the Alif-zai are one branch. They cultivate a little wheat and barley, but insufficient for their own wants. They claim a descent from Nusherwan similar to the Udaipur Rajputs. They are the dominant tribe in Kharan. The Dagari and Hijbari tribes are said to be the original owners.

The Rodani Rind are at Asbi Khan and Puden, the Ghazghi and Samalari are in the hills west of Khanak, and the Sunari in Dasht-i-Goran.

Jhalawan province has that of Saharawan on the north and west, Las-Beyla on the south, and Cutchi and Sind on the east. It lies between lat. 26° and 29° N., and long. 65° and 67° E., and comprises the districts of Sohrab, Zahri, Baghwan, Khozdar, Zidi, Kappar, Wad, and Nall, together with the hills occupied by the Mingal, Bizanju, and Samalari Brahui. The inhabitants are pastoral, and have large flocks of sheep. Jhalawan has less elevation than Saharawan. Many of the tribes are supposed to be of Rajput origin; and, until lately, the practice of infanticide was prevalent amongst them. Near Bagwana Dr. Cook saw a cave in the rock filled with the dried mummy-like bodies of infants, some of which when seen had a comparatively recent appearance. The fixed population in their little towns does not exceed 10,000, and are greatly exceeded by the pastoral tribes. The great Brahui tribes of Mingal and Bizanju give them the preponderance. The Bagwana valley is all well cultivated.

Bizanju Brahui inhabit the districts of Nall, Urnach, and Kolwah, also Ormara in Makran. They have 10 sections,—Tamarari, Muhammiadari, Gabarari, Umarari, Nindowari, Ludani, Lotani, Chanal, Baduzi, and Siapad. Many of the sections occupy the Urnach valley. The two great divisions, the Umarari and Tamarari, are west of, but on the same hills as, the Mingal. They are a violent people, and much addicted to rapine.

harzai is a predatory tribe in the Chiru Nal valley in Jhalawan.

Khozdar, a sub-district of Jhalawan, has the Mardui Brahui tribe. They smelt lead from a carbonate ore.

The Mingal, a powerful Brahui tribe, dwell in the southern hills of Jhalawan, from the limits of Khozdar to Bela in Las. Their manners are rude and their habits predatory. The Shahi-zai and Phailwan-zai are their two great divisions. They pretend to be able to raise 18,000 fighting men.

Ziggar Mingal dwell in Nushki to the west of Saharawan. They are hospitable, and adhere to their promises. The Ziggar Mingal and Rakshani of Nushki have no proper towns or villages, but reside in tents, though not migratory. Their river, the Kaiser, is useless for irrigation, and is lost amongst the sands. They cultivate wheat at the skirts of the hill ranges supporting the plateau

of Saharawan. Snow seldom falls. The Ziggar Mingal at one time occupied the Dasht-i-Goran near Kalat, but their increasing numbers compelled them to emigrate into Nushki, disposing of the Rakshani, of whom two tomans or clans still reside at Nushki. They have a much-valued breed of horses, called Tarji. Their flocks are very numerous.

The Nusherwani, the ruling tribe in Kharani, extend into Nushki, others into Baluch Makran, Panjgur, and Kolwah.

Sageti (Sajadi?) have about 700 adult men. They inhabit the valley of Graisha in Jhalawan. They are supposed to be descendants from a portion of the force that marched southwards with Alexander. The chief family of the tribe are the Saki, distinctly of Scythian origin. They are of those Sakæ who formed part of Alexander's army, and whose country is stated by Dr. Wilson to have been that lying between the Paropamisian mountains and the Sea of Ural. It is not improbable that they accompanied Alexander as far as the south of Sind, and, returning with Craterus up the Moolla pass, settled in their present position. Sakæ still occupy the borders of the Caspian.

Zahri or Jahri, a Brahui tribe in Jhalawan.

Nushki is an extensive province west of Jhalawan. It has several towns and castles, and is inhabited by Mehmasani, Nusherwani, and Mirwari.

Mirwari Brahui are in Nushki, Jao, and Kolwah in Baluchistan.

The Mehmasani have branches in Seistan and in the hills of Luristan.

Kalat town, in lat. 29° N., and long. 66° 40' E., is the capital of Baluchistan. It is 7000 feet above the sea, in a narrow valley, with the hills of Cutch Gandava on its east. Its soils are rich, and it has one permanent stream, with several of the karez aqueducts. Kalat district is the principal district of the Brahui race. The town was taken by storm by the British Indian army on the 13th November 1839, from the northern or Mustung gate. The population consists of the dominant Brahui, and of Baluch, Dehwar, Babi, Afghans, Ghilzæ, and slaves. The miri or citadel has the palace of the khan. The Babi suburb is on the south side; Brahui, Ghilzæ, Afghans, and others dwell in the Past-i-Shahr, and Afghans are in all the suburbs. The number of the inhabitants has been stated at 12,000, and that of its houses at 800. The Ahmadzai branch of the Kamburani is the section of the Brahui to which the Khan of Kalat belongs. It is said to be descended from Kambur, son of the Imam Kambur; but Kambur, in Baluchki, means an Abyssinian, and the dominant tribe is believed to have come from that country, and to have been ruling since the middle of the 17th century.

Gadad are the slaves (Khanazad, household guards) of the Brahui rulers. Every family of consideration in Baluchistan has slaves either of African origin or of captives taken in predatory excursions.

Dehwar speak pure Persian. They are the settled inhabitants of towns and on culturable lands. They are called Tajak in Persia, Sart in Bokhara, and Dehgan in Afghanistan, Dehwar and Dehgan meaning villagers. They are a quiet, orderly people. In Baluchistan they have about

thirty sections, in five grand divisions. Dr. Cook says their language is nearly pure Persian; they inhabit the Delh or villages, and do not migrate, are an agricultural people, hard-working and poor.

The Babi or Ababi are a wealthy trading class in the Shal district and at Kalat. They are stout, well-made men, with good features and pleasant manners. They appear to have come originally from Afghanistan. They have four khel or sections,—Umar, Hija, Chur, and Ganga.

Cutch Gandava for brevity is generally called *Cutchi*. It is bounded on the N. and N.E. by the Murree and Bugti countries, on the W. by the Hala mountains, on the E. by Sind, but is separated from Sind in the S. by a desert strip 20 miles broad. From these bounds it will be seen to extend from the town of Dadar, near the mouth of the Bolan pass in the N., to near Khyree Gurree in British Sind in the S., a distance of 100 miles, and from the Hala mountains on the W., 150 miles eastwards to the Panjab. The surface is nearly uniformly flat, and is mostly a waste, for although the streams of the Bolan, the Narra, the Shari, and the Teywaugh run through it,—and wherever water is obtained *Cutchi* can be cultivated, and bajra (*Penicillaria spicata*) and *juari* (*Sorghum vulgare*) grown,—the air is arid, the average annual quantity of rain being about two inches, and for two or three years at a time there may even be no rain. When it does fall, a severe form of fever follows, from which no one escapes. Except within the influence of irrigation or after successive seasons of favourable downfalls, *Cutchi* may be termed a desert waste. Bagh, the principal town, in lat. 28° 56' N., and long. 67° 54' E., about 38 miles from Dadar, has a population of 8000 to 10,000; the neighbourhood is positive desert or Pat. Gandava is the second town.

Dadar, in lat. 29° 28' N., and long. 67° 34' E., and 743 feet above the sea, is also a town of some importance. It is 5 miles from the E. entrance of the Bolan pass, and is well supplied with water from the Bolan river, but it is almost surrounded by hills, and the closeness and great heat have given rise to the Persian saying, 'Ai Allah! Dozakh chira sakhti chon Dadar hasti!'—(O Lord! why did you make hell, when you have Dadar? The Bolan pass is 54 miles long reckoning from its mouth, 5 miles W. of Dadar, through the Hala mountains to the Karaki, 2½ miles to the E. of the Dasht-i-be-Daulat, 5900 feet above the sea, where the fertile, well-watered valleys of Mustung and Shal occur. From April to August, the climate of *Cutchi* is proverbially sultry, and the desert blast, the bad-i-simum or jahoh, sweeps across it. In winter the climate is temperate, and the Khan of Kalat, and all the wealthier Brahui, as also the Rind Baluch, resort to it. The khan takes up his residence at Gandava, but Bagh is the more important town. The several tribes in *Cutchi* number in all about 100,000 souls. It is inhabited by very distinctly marked races,—the Jat, Rind, Maghazzi, and Brahui. The Jat seem the original race, and occupy the centre of the province. The Rind, lawless sub-tribes, Jakrani, Dumki, Bugti, and Murree, are a more recent intrusive race dwelling on the skirts. The Doda, a division of the widely dispersed great Murree tribe, for the last three centuries have occupied the hill ranges E. of the plain of *Cutchi*. The Murrees are a brave race, long distinguished as daring depreda-

tors. In 1880 they harassed the British in the advance to Kandahar.

Harand and Dajil, in *Cutch Gandava*, but bordering on the Indus, are inhabited by the Gurchani, and have the Mazari on their south.

The pastoral and agricultural tribes are the Jat, the Khosa, Jamali, Jettui, Machee, Oomrani, Randani.

The Dumki sub-tribe of Rind claim a Persian origin; they are a hardy, brave, and martial race.

The Jat, distributed throughout Baluchistan, are all Muhammadans. Those of *Cutchi* have 22 sections engaged in tillage: also 18 sections of camel-breeders.

The Jat of *Cutchi* dwell in villages.

The Guruwani tribe in *Cutchi* follow Muhammadanism, but are descendants from former Hindu rulers in the highlands of Baluchistan.

The Kaihri is a strong but peaceable tribe in Chatar and Pulaji in *Cutchi*, who claim to be Shaikhs from Afghanistan. They rendered good service to the British. They suffered defeats in 1828 from the combined Murree, Bugti, Dumki, and Jakrani, and were driven out of the country, but were restored by Sir Charles Napier after his hill campaign in 1845. He enrolled eighty of their number as irregular horse, and stationed them in the *Cutchi* side of the desert. These are still kept up, at Rs. 14,580 per annum of pay.

The Langao tribe is of Hindu origin, and retain the Hindu titular appellations. They dwell S. of Bagh in *Cutchi*, and in the valley of Mangachar between Kalat and Mustung. Their Makhizai offshoot reside in Gwadar.

The Magheri tribe have four subdivisions,—Hajizai, Bamberai, Blond, and Arhani. Their chief town, Jalal-Khan, is N.W. of Bagh.

The Jatui is a small agricultural sub-tribe of Rind Baluch between Shikarpur and the Indus, also in *Cutchi*. They were formerly predatory, but are now peaceable. They have eleven subdivisions.

The Tarin, a Pathan tribe furnishing about 700 fighting men, inhabit the country to the north of *Cutchi*.

The Jakrani tribe is Baluch; they occupy the portion of *Cutch Gandava* to the E. of Chutar and Shahpur. They are a section of the Maghazzi. They have nine subdivisions,—Salivani, Majani, Sujapaz, Suwanani, Sudkani, Solkani, Mulkani, Karokani, and Dirani, and have 300 fighting men well mounted. They and the Dumki before British annexation were largely predatory, but after Sir Charles Napier's campaign in 1845, the best portion of this tribe was removed to fertile land near the Kashmir desert in the Jacobabad district. They used to unite with the Dumki, and could muster for plundering about 1500 horse-men well armed, with about 500 more able-bodied armed men on foot. The Jakrani carried on their forays on horseback, and levied black-mail on all merchants. They are now peaceful cultivators of their own and Government lands.

The Kojah are a section of the Kakar Afghans who have settled in the district of Sibi in N. *Cutchi*. They have attained to great power, and in 1840 had 700 fighting men. Their country is richly cultivated.

The Barozai or Barozhi, a clan of Pathans, reside in the town of Kurk in Sibi, a semicircular bay 25 miles across, in the hills N.E. of Dadar, and

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irrigated by canals from the Narra river. They number 700 men. They are living between the Brahui, Murree, and Kakar, and have adopted the Baluch manners and customs. They pay tribute yearly to Kandahar.

The Bugti is a sub-tribe of Rind Baluch who occupy the hilly country to the W. of the Rajanpur border. Their six divisions, and the number of their fighting men, have been stated as under:—

Kaheja, . . .	120 to 175	Kalpar or Sekh-	
Nothani, . . .	...	arce, . . .	150 to 250
Firozani, . . .	430	Phong, . . .	20 to 150
Zarkani, . . .	380	Kiazni or Sham-	
Masuri, . . .	180 to 325	bani, . . .	350 to 500

Thus the total number of the Bugti fighting men has been variously estimated at from 1300 to 4000. Their country is chiefly rugged and barren, but contains much good pasture land and some fertile valleys. They sell cattle and sheep to the people of Sind. Their Kaheja, Kalpar, Nothani, and Phong clans inhabit the hills on the N.W. frontier of Sind and Cutchi and the S. part of the Mazari country on the Panjab. The lands of the Shambani and Masuri clans extend along the Panjab frontier, between the British military posts of Banduwala and Sabzil-ki-Kot on the E., adjoining the Mazari and Dreshuk, with the Gurchani on the N., and the Loharani Murree on the W. The Bugti and Murree were incessantly at war through a prolonged period. In 1839 the Bugti made predatory attacks on the British army as it advanced on Afghanistan, and were then defeated by Major Billamore. In 1844-45, Sir Charles Napier moved against them with a force of 7000 of all arms, besides a number of Murree Baluch auxiliaries, but only about 3500 Bugti seem to have opposed. The campaign lasted fifty-five days, with little loss to the Bugti. Major Jacob, in 1847, was subsequently engaged against them, and they suffered much distress for food; and on the 1st October 1847, Lieutenant Merewether killed 600 of them, with a loss on his side of 9 killed and wounded. They have since made several inroads on British territory; but they were broken up, and removed to lands near Larkhana. Such of them as wished returned in 1851 to their own country, and are now orderly, industrious, and contented. Their valley of Mutt is well cultivated, and produces excellent wheat and millet, and they sell their sheep and wool. The original Hindu inhabitants of the Mair and Bugti hills were driven out by their present occupants, but the natives of Barkhan (the Khetran), inhabiting the more mountainous district to the northward, were able to hold their own. The whole are nominally subject to the khan as chief of all, but his power appears to vary with his popularity. Dehra Dibrak, or Dehra Bugti, is the capital of the Bugti. It is in the Sinaf valley, and is their only town, for they are essentially nomade. Major Billamore's force captured it in 1839, and again in 1845 General Simpson's column. Bugti occupy also the southern portion of the Suliman mountains, a tract of extremely hilly, stony, and barren country beyond the British frontier on the west, and south-west of Mithenkot in the Panjab, and north of Shikarpur in Sind. They acknowledge the Khan of Kalat. Their valleys are numerous and fertile, with streams flowing through them. They have nine sub-sections. They can muster 1000 fighting men.

The Mazari, a sub-tribe of Rind Baluch, occupy the tract of country on the right bank of the Indus, between Mithenkot and Burdeka, partly in the Panjab, partly in Sind. They are south of the Dreshuk. The adult males are about 2500. They long continued predatory, and were the most expert cattle-stealers on the border. They are now orderly, and sided with the British in the Indian mutiny of 1857. They have 39 sub-sections.

The Murree sub-tribe of Rind Baluch inhabit the outer hills which surround Cutchi on the east, north, and north-west sides. They are subjects of the Khan of Kalat. They have the Tarin and Luni on the north, the Khetrani and Bugti on the east, the Bugti on the south, and Kakar on the west. Their districts are Kahun, Mundahi, Jantahi, Phailawar, and Nisao. Their four sections are Ghazani, Loharani, Bijarani, and Mazarani. They number 8000 souls, with about 2000 to 3000 fighting men. They are predatory. Their opposition to Captain Browne of the 5th Bombay N.I., who defended Kahun, and to Major Clibborn in 1839, is matter of history. In 1859, an expedition under Major Henry Green was sent against them. Many of this clan settled in Lower Sind, in the Khayrpur country, and in the districts near Sukker, but these have not for several generations had communication with the independent hill Mairi. The country of the hill Murree is mostly barren hill, with many extensive valleys and fertile spots; it extends from the neighbourhood of the Bolan pass on the west to the Bugti and Khetrani country on the east about 100 miles, and from Surtoff on the south to the Afghan territory on the north about 80 miles. The Narra river and its large tributary the Lar, also the Lharree, run through it. Their chief town is Kahun.

The Shum plain formerly belonged to the Shumbani tribe, but they have been driven from it by the Murree, who devastated all the country around their own district. The Dauggati or wild ass roams over the elevated plain.

Gurchani dwell south of the Lughari. They are said not to be pure Baluch; the tradition being that Doda of the Delh caste was banished from his tribe, and, mounting his mare, he rode into the desert, lost his way, wandered on and on, until at last he was found by the Rind more dead than alive. After trying all other means to revive him, a young virgin was sent to lie with him, that the warmth of her body might restore him to life, which was effectual, and he married her. His family rejoined him from Tatta or Sewerton in Sind. The Gurchani have 49 sub-sections.

The Dreshuk is a Baluch tribe dwelling south of the Gurchani. They are large landowners, but all their lands are cultivated by the Jat race. They have ten sub-sections.

The Khetrani or Khutran tribe, about 18,000 in number, are in a district in the hills of Baluchistan to the north of the Bugti country, which their district adjoins. Its greatest extent is about 120 miles N. and S., and 70 miles E. and W. The chief town is Barkhan, which is about 160 miles N.N.E. from Shikarpur. N. of the Khetrani are the Afghans, to their W. the Murree (Baluch), and on their E. are the Lashari and Gurchani tribes. The Khetrani are not Afghans nor Baluch, but they intermarry with both these races. They follow agriculture, and are of peaceable habits, their country being sufficiently fertile to supply their

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wants; and though brave and ready to fight when attacked, they abstain from plundering their neighbours. The river Lar runs through their country.

The Lashari and Gurchani dwell in a barren and unproductive strip of country between the Khetrani and Multan. They are shepherds and herdsmen.

The Jamali is a small, poor clan of Baluch cultivators and shepherds, who reside at Rojhan at the N.W. of Shikarpur, and on the edge of the Barshori desert, also in E. Cutchi. They dwell in Upper Sind along with the Jettui, a similar tribe. They are principally in Khyra Garhi in Larkhana. They are not predatory, and some are artisans. A tribe of the same name is found in Lower Sind.

The Dumki tribe occupy the territory between the Mazari on the N. and the Burdi on the S. They were the most martial and formidable of all the Baluch tribes. General Jacob disarmed them, and they subsided into peaceable and industrious cultivators.

Burdi are a small tribe of Baluch, residing mostly in the Burdeka district on the western bank of the Indus, with the Mazari district on the north and Sind canal on the south. They continued predatory until the year 1860, combining with the predatory Dumki, Jakrani, Khosa, etc.; but on General Jacob disarming all the population of Sind, and cutting a road through the forest, this sufficed to render the Burdi peaceable and well-disposed cultivators. Several small branches dwell in Sind and Cutchi.

The Khosa tribe is scattered all over the country between Nuggur Parkur and Dadar, and have several villages on the Sind border. They are said to have been originally Abyssinians. The tribe is found in many parts of Upper Sind, Cutchi, and on the southern frontier of the Panjab. Major Pollock, writing in 1860 of the Khosa in the plains of Dehra Ghazi Khan, said a Khosa who has not been in jail for cattle-stealing, or deserved to be, who has not committed a murder, or debauched his neighbour's wife, or destroyed his neighbour's landmark, is a decidedly creditable specimen; and if, added to this, he is out of debt, he is a perfect marvel. They have 35 sub-sections.

The Maghazzi are subdivided into four principal families or clans, of which the Butani of Jell are the most illustrious, and give the chief or sirdar to the whole. They boast of being able to muster 2000 fighting men; between them and the Rind a blood feud long existed. The Maghazzi and Rind are alike addicted to the use of ardent spirits, opium, and bhang. They are one of the principal Baluch tribes in Cutchi. Their chief town is Jhal, 24 miles from Gandava, at the foot of the western hills. They can raise a formidable force of well-mounted men. They resemble the Narui in size and stature, and, like them, have good features and expressive countenances, but are not capable of bearing so much fatigue. A small number of them in 1830 defeated the Rind. Pottinger included amongst the Maghazzi, the Abrah, Burdi, Isobani, Jakrah, Jakrani, Jalani, Jataki, Kalandarani, Lashari, Matihi, Musani, Kakrani, Nari, Turhandzai, and Unar. Pottinger considered them to be of Jat origin.

LAS.—Las and Makran are two seaboard provinces. Their coasts are arid and sterile, with sandhills and other rugged hills near the sea.

The Las province lies between lat. 24° 50' and 26° 15' N., and long. 65° 28' and 67° 18' E., with an area of 5000 square miles. Las means the plain country. Las extends from the Hingor river to the river Hubb (by Ras Muari), and is separated from Lower Sind and the delta of the Indus by the Hala mountains. Its chief town is Bela (Beyla), and is the residence of its chief, the Jam. The houses of this town are mean, but ancient coins, trinkets, and funeral jars are exhumed near it.

The Chandra kup or basins of Rama Chandra are in the province of Las, near the Phor stream, on the road to the temple of Hinglaj, and between the greater and lesser Hara mountain ranges. The kup are seven small truncated conical hills of very light-coloured earth, rising two to four hundred feet somewhat abruptly from the plain, with numerous fissures at their base. They are saline mud volcanoes, the mud constantly bubbling up, and sometimes overflowing. There are similar mud volcanoes in Makran.

Shahr Roghan is a deserted town of caves resembling those of Bamian. It is about 9 miles north from Bela in Las, on either bank of the Purali river, in a wild, broken ravine, with cliffs rising perpendicularly 400 or 500 feet. The excavations, about 1500 in number, are in the form of rooms 15 feet square. The legend connected with it resembles that of Tobit and the seven friends. It relates to a beautiful but demon-harassed princess, Buddul Tunnal, who slew her seven lovers, and was at length rescued by Saif-ul-Mulk, son of the king of Egypt.

Hinglaj in Las is famous for its Hindu temple. It is on the Hara range, near the Aghor or Hingor river, about 30 miles from the seaport of Ormara, and 150 from Kurachee. It is one of the fifty-one pita or spots on which, according to Hindu belief, the dismembered limbs of Sati or Durga fell. Muhammadans regard it as the shrine of Bibi Nani, the Nanaia of the old Babylonians, Bactrians, and Persians.

It has many subdivision, such as Jamhot, Gungah, Angariah, Chuta, also the Gadur, Masorah, Maughia, Shekh, Shahoka, Sur, Vahreh, Sabrah, Mandarah, Runja, Burah, Dodah, etc. The population of Las province has been estimated from 30,000 to 60,000 souls. Their tribes are the Lumri or Numri, the Chuta, Med, Jokia, and Barfat. The people are Muhammadans, many of them of the Mehman sect. The seaport Sonmiani contains numbers of the Mehman sect or race, and part of the fixed population of Bela is called Jaghdal.

The Lumri or Numri is the dominant tribe, and is commonly termed the Lassi branch of the Lumri tribe. The Lumri or Numri are believed to be descendants of the Samma and Sumra Rajputs. They trace their origin to Sumar, who founded Samarcand, and acknowledge a consanguinity to the Bhatta of Jeysulmir. Lumri have obtained possession of all the hill tract lying between the Pabb mountains and the Indus, east and west, and between the Mallir and Bharun rivers on the north and south, from which, about A.D. 1780, they ultimately drove the Khosa. Their features resemble those of the Rajputs. They wear arms, but they are peaceful shepherds and cowherds. They form the bulk of the population of Las. The Jamhot or Jamot are the dominant tribe of the Lumri, and furnish the Jam or ruler

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of the province. The Dodeh are a section of the Lumri in Las. The Lumri are an active, hardy, pastoral people; their wealth consists in flocks of goats, with fewer buffaloes and camels. They despise agriculture; wild Lumri are found grazing on the rocky banks of the Hab river. Their language varies little from that current in Sind. They manufacture coarse fabrics from the wool of their goats and camels. The Lumri eats meat almost raw, and is greatly addicted to the use of opium.

The Biruvi tribe dwell near Bela; they sell their children when in want. They are better looking than the Sidi, and, as they speak Sindi, Hindus prefer them as domestic servants.

Hormara, a sterile district with a port of same name, is subject to Las. Near Jabal Malan is a tribe called Gujur; at Garuki, the Saugor tribe; and at Hormara in Makran, with four hundred houses, is a tribe of this name. The Hormara tribe say they came originally from Sind. Persani, west of Hormara, is a small port of two hundred houses.

Chuta, a small tribe of 2500 souls, occupy a district of the same name, on the river Hub, which falls into the sea at Cape Monze. They are said to be of Sumrah, but also, it is said, of Brahui origin, and seem to occupy the Pubh hills of Kurachee, on both banks of the river Hub, and separated from British territory by the Kurter, Mihi, and Mol hills. The Chuta say that when Dodeh, their ruler, fell in the battle by Allah-ud-Din, the Chuta tribe left Sind and joined the Brahui. They are pastoral, cattle graziers. They are of smaller stature than the Sindians. Their huts are of mat or of coarse blanket, drawn over a rough framework of sticks. They wake their dead. They are quarrelsome, and so addicted to thieving as to have an alliteration of their name Chuta Buta, Chuta Rogue. They have 14 clans.

Las has two or three places for receipt of custom.

MAKRAN is a province which extends from Jashk to the Hingor river. Makran has Persia on the west, the provinces of Las and Jhalawan on the east, Persia, Afghanistan, and the Kharan district on the north, and the Arabian Sea on its south. Its western portion is under Persian rule, and its eastern under the Khan of Kalat; the boundary being at long. 62° E. Its name is supposed to be the combination of two Persian words, Mahi-khoran, Ichthyophagi. It was also known to the ancients as Karmania altera. From Cape Jashk on the Purali river, a distance of 500 miles, the shores of the coast of Makran are washed by the Arabian Sea. It is a district of hills and valleys, in parallel ranges running east and west, but almost rainless. On many of the hills are beds of clay, 50 to 150 feet thick, containing fossil shells of the miocene formation. Between Gwadur and Ras Kucheri are many of the mud volcanoes called Chandra kup, and near Ras Jashk is a hot spring with a temperature of 128°. One group of the Chandra kup, consisting of three cones, is a mile to the westward of Huki and about 60 miles from Sunmiani. The other group, consisting of two cones, is about 10 miles north of Ormara.

It is the most westerly of the Kalat territories, and is sometimes called Kej Makran. It is the Gedrosia of the Greeks. It is inhabited by many tribes, of whom the Gitchki is the most numerous,

but about half the population is of a sect of Muhammadans called Zigger. Its chief town is Kej; Gwadur and Ormara are seaports, and Panjgur is an inland town. The Makran and Las region has been familiar to Europeans ever since the trying march across it of Alexander the Great. He left Patala in Sind (presumed to be Tattah on the Indus) some time in March or April, and proceeded in the direction of Bela, crossing in his route the lower ranges of the Brahuik mountains. Thence he marched in the direction of Jao (Jhau) in Makran, forcing a very difficult pass some distance south of the ancient town of Gwajak, where he was opposed by the natives. He then kept nearer the coast, traversing the present Kolwah district, experiencing much difficulty in obtaining water, and suffering from fatigue, hunger, and thirst, until he reached the fertile valley on the western border of Gedrosia, the present Banpur, from which he passed into Karmania, the present Persian province of Kirman.

The names of the places mentioned by Arrian on the Las and Makran shores, viz. Malana, Araba, Kalama, Derembosa, and Kophas, are still retained in the modern designations Malan, Araba, Kalamat, Darambab, and Kophan. The *Asthæ* of Ptolemy and Kamina of Nearchus, is the small island of Satadip, called Asthilar by Arabs and Baluch, lying a short distance off the Makran coast, between Ormara and Pasni, its other names being Astola Island, Haftala, Sataluh, and Sangadip. It was much resorted to by the Juasmi pirates. Hindu pilgrims visit it.

In the time of Marco Polo traffic seems to have been directed through Makran, whose people, he says, 'live by merchandise and industry, for they are professed traders, and carry on much traffic by sea and land in all directions. And you must know that this kingdom of Kes Makran is the last in India as you go towards the west and north-west.'

The habits of the people on the coast seem to be identical with those of the races who are known to have dwelt there two thousand years ago, and described by the ancients as the Ichthyophagi. From Basrah to Hormuz, and eastward to the Indus, the sea-coast people still principally live on fish. The Mahi-abah and Mahi-ashnah, literally fish-bread and fish-soup, used among the people of Las, is prepared from fish (more particularly a small kind found near Hormuz), dried by exposing it to the sun. Strabo and Arrian relate that the ancient Ichthyophagi made into bread in a similar manner, the fish, which they dried and roasted. The region of the Ichthyophagi, as known to the ancients, commenced at Malana, near Cape Arabah, and ended between the ancient Dagsira and the place now called Cape Jashk. Churchill's collection of voyages mentions that 'the coasters of Persia, as they sailed in this sea, seemed as a parched wilderness, without tree or grass; those few people that dwell there, and in the islands of Las and Cailon, live on fish, being in manner themselves transformed into the nature of fishes. So excellent swimmers are they, that seeing a vessel in the seas, though stormie and tempestuous, they will swimme to it five or six miles, to beggo almes. They cate their fish with rice, having no bread; their cats, hennes, dogges, and other creatures which they keepe have no other dyet.' Nieuhoff, also, who travelled in 1662, says that

about Gambroon, the common people make use of 'dates instead of bread or rice; for it is observable that the ordinary food of the Indians, all along the coast from Basora to Sindo, is dates and fish dried in the air; the heads and guts of the fishes they mix with date-stones and boil it altogether with a little salt water, which they give at night to the cows after they come out of the field, where they meet with very little herbage.' At the island of Kharak, also, at the present day, fish and dates are the chief articles of the people's food, and fish is still the staple article of food of the inhabitants on the sea-coast of Baluchistan.

There are, in Makran, cyclopean structures raised by some unknown prior race. They are called Ghorbasta or Ghorband, and bear a resemblance to the cyclopean remains of Europe. They are built across ravines and on the declivities of mountains, to form tanks and to distribute the water. They must have been constructed by a race who had, on entering it, foreseen that the country would not otherwise support them, and the race is supposed by Dr. Cooke to have been Pelasgi, or a people with kindred habits.

Ras Jashk, or Cape Jashk, is the western limit of the Makran seaboard. The inhabitants of the village near it are Baluch and Arab fishermen.

The present population of Makran, about 200,000, consists,—1st, of Gitchki, Boledi, and Malikhah, who furnished the ruling chiefs in Makran; 2d, the second class are great and powerful tribes, some of them of Brahui origin, viz. the Bizanju, Nushervani, Mirwari (Brahui), and some Narui or Baluch, viz. Hot and Rind; 3d, tribes of respectability, viz. :—

Ashkani.	Jatgal.	Lagaori.	Sajadi.
Bar.	Kaodai.	Mulai.	Saugorif.
Band.	Kalmati.	Maidizai.	Singalu.
Birdi.	Ketwari.	Puzhi.	Shahzadah.
Gojah.	Kosaji.	Raisi.	Wardili.
Gorji.	Kotigi.	Shebi.	Zishtkhan.

4th, inferior tribes, viz. :—

Bahari.	Kolwah.	Lori.	Med.
Durzadah.	Langao.	Lundi.	Zati.

The Makran tribes are hospitable, faithful to their agreements, and courageous. Though averse to European discipline, they take service with Sindhia, Holkar, the Gaekwar, and the Kattyawar chiefs. The Makrani is capable of great fatigue and endurance, though not of large frame. Their language is a branch of ancient Persian. Their houses are mean, chiefly of matting.

The Saugor, a tribe of Baluch, are fishermen.

Gwadar town is occupied by 4000 or 5000 inhabitants,—Biahdiah, Arab, Hindu, Khojah, Med, and Korawa.

The small seaport village of Chaobar or Charbar, belonging to the Imam of Muskat, has 560 inhabitants, consisting of Med, Bosdar, Keji, Tizi, Shirik, Khojah, Bania, and Hamali.

The Raushani Narui, in Upper Makran, are numerous and influential, and have the following sections:—Arbabi, Khasoji, Kurd or Shahidi, Malika, Ming or Mind, Rakshani, Sajadi. The Rakshani give the chief to the tribe.

The Mand district is occupied by a lawless portion of the Rind tribe.

The Jagdal, Jalgal, Zodal, or Zadgal tribe, in Makran, are of Lumri or Numri origin, immigrants from Sind and Las. They wrested power from the Boledi, and now hold the Baho Dashtiar district under the Persian Government.

The Kalmati or Karmati tribe in Baluch Makran are immigrants from Sind.

The Hot, a Baluch tribe, is widely spread over Central Makran, in Tump, Dasht, Baho, and Geh. They are the most numerous in the province, and are held in high consideration.

The Mirwari tribe dwell in Mushki, Jhao, and Kolwah. Pottinger in 1810 said their fighting strength was 7000. Masson says they are of the Kamburani family now ruling at Kalat.

Ashkani Baluch are settled in the hilly districts north of Kej, in Baluch Makran.

The date trees of Makran flower in February and March, and the fruit ripens in August and September. When in full flower, a stalk of the male flower is inserted into a small incision made in the core of the top of the female tree.

The maritime and fishing population of the little ports on the coast of Makran, from Sonmiani to Charbar, are often denominated Med, and comprise four divisions,—the Guzbur, Hormari, Jellarzai, and Chelmarzai. Med fishermen are boat-owners. Padilarees have no boats. The other fisher races are the Korawa and the Raisi. The Kaodai or Khudai, a tribe in the Dasht and Kolwah districts of Makran, are a well-to-do and respectable people. Lagaori tribe in Persian Makran are perhaps the Laghari.

The Birdi is a tribe settled in Makran.

Zati or Sati occupy chiefly Baho and Dashtiar. The Shahzadah are of Arab descent. They first settled in Sind, but migrated afterwards to Juni, Dasht, and Baho, in Makran.

The Boledi also is an Arab tribe, which has taken its name from that of a town in the Kej district. In the 17th century they seem to have subverted the power of the Malika, only to be, in their turn, put aside by the Gitchki.

The Kolwah dwell only in Gwadar, in Makran, to which they came from Juni, where they were slaves or servants to the Shahzadah. They are a seafaring people, superior to the Med in social position; but, like the Med, superstitious and immoral, with peculiar religious rites.

Panjgur (or Panchghar) is a district of Baluch Makran about 100 miles to the N.E. of Kej. It is a rich and fertile tract, with a cluster of forts and villages amongst groves of date trees, for which it is celebrated. It is occupied by the Gitchki tribe of Brahui, of peaceful and agricultural habits, and also by the Nushervani tribe of Persian origin, the two tribes being at feud.

Kolwah is an extensive valley of Baluch Makran, immediately west of the Jhao district. It is separated by a sterile hilly tract from the maritime district of Ormar. It is four or five days' journey from the coast, has several villages and castles, and is occupied by the Bizanju, Kaodai, Mirwari, Ormarari, Rakshani, and Nushervani tribes, who interchange their commodities with the coast, sending wool, ghi, hides, and bdellium. Wheat is largely grown here.

The Homarari occupy Balor. Ormarari may mean the people of Ormar.

The Banpur valley is a province in the Kohistan of Baluchistan. It was annexed by Persia about 1845, and now forms part of Persian Baluchistan. It was at this valley that Alexander emerged from the arid tract he had followed through Bela, Jhao, and Kolwah.

Jhao or *Jao*, a valley to the west of Las, and

east of Kolwah, is sparsely inhabited by Bizanju, Halada, and Mirwari (Brahui), who are rich in herds of cattle, buffaloes, and camels, and in flocks of sheep and goats. It is well wooded, without cultivation. The valley has but one village, Nandaru. Numerous mounds, here called *dam* or '*dain*,' exist, where coins and trinkets are found, remnants of some former civilisation. These *dain* occur in other parts of Baluchistan. There is also the site of an ancient city, which Masson has suggested may be that founded by Alexander the Great amongst the *Oritæ*.

Kej is a division of Makran, and properly included the districts of *Dasht* and *Kolanch*.

The *Kolanch* district has a population of 2000 of the *Puzhi*, *Band*, *Wardili*, *Jagdal*, and *Bizanju* tribes.

The *Dasht* district extends from *Gwetar Bay*, N.E. to the vicinity of *Kej*, a distance of about 100 miles. The inhabitants are members of *Bar*, *Birdi*, *Hot*, *Knodai*, *Shahzadah*, and *Rind* tribes, in all probably 3000 or 4000 persons.

Kej town was the former capital of Makran, and is now the residence of a deputy of the *Khan* of *Kalat*. It is a cluster of small villages and forts in the great valley which traverses Makran from east to west. The population consists of *Gitchki* of much importance, the *Raisi*, the *Mulai*, the *Sangura*, *Durzada*, *Leri*, *Lundi*, and *Kutwari*, about 10,000 souls. The name of the district of *Kej* Makran is written by *Mandelelo Getsche Macquerono*. *Marco Polo* names it *Kesmacorono*, which is supposed to be *Kej mahi-khoran*, fish-eating *Kej*. *Ibn Haukal* (p. 140) says 'the *Baloujes* are in the desert of *Mount Kefes*, and *Kefes* in the *Parsee* language is *Kouje*, and they call these two people *Koujes* and *Baloujes*. The *Baloujes* are people who dwell in the desert.'

The *Gitchki* tribe are settled both in the *Baluch* and *Persian* portions of Makran, but have their chief residence in the town of *Kej*. They are said to be descended from a *Sikh* named *Mar Singh*, son of *Pana Singh* of *Lahore*, who in the early part of the 17th century settled with his companions in the *Gitchi* district. One branch resides in *Kej* and *Tump*, and another at *Panjgur*. Since the beginning of the 18th century, they have been at feud with the *Boledi*, but intermarry with them. Some are of the *Zikri*, some of the *Dai* sect.

Mulai or *Mullai*, a *Baluch* family settled in *Kej*; it is not numerous, but is respectable, and some of them seem to belong to the *Zikri* sect.

Ketwari is a *Brahui* tribe in the *Kej* district.

Kosnji, a tribe occupying *Baho* and *Dashtiari* in *Persian* Makran. *Baho* and *Dashtiari* are under the superintendence or rule of two *Jagdal* chiefs. The inhabitants are *Jagdal*, *Hot*, *Latti*, *Raisi*, *Laghari*, *Kosnji*, and *Shahzadah*.

RELIGION.—The people of Makran are *Sunni* *Muhammadians*, but have amongst them the *Dai*, *Mazhabi*, or *Zikri*, the *Biadhiah*, and *Khajah* sectarians. The *Khajah* are often opprobriously designated *Lutiah*. The *Dai* or *Zikri* sect are in *Baluch* Makran, in *Kej*, *Kolanch*, and *Kolwah*. The *Dai*, met with at *Gajer*, resemble the *Brahui* in appearance, and wear the same dress. Portions of certain *Brahui* tribes are *Dai*, such as the *Sageta*, *Saki*, *Shadu*, *Shahduzai*, *Marbrow*, etc. They say that they originally came from the westward near *Kej*, where there is a city called *Turbot*. The sect abounds in Makran, and has extended

east. At *Turbot* is a little hill of circular form, called by them *Koh-Murad*, on the summit of which is their principal *masjid*, where they meet at stated times to perform their rites. Their book is said to enjoin them to curse *Mahomed*, and in derision to say *God is God*, but the mother of *Mahomed* is *His* prophet. Their ritual services are conducted at night; men and women assemble, and revolting acts are said to be practised during the wild state of excitement into which they work themselves. Their prophet is *Mahdi*, and they date their origin from A.D. 1591 in the *Panjab*. At marriages their priest is said to see the bride, but all these may be calumnies, as they are of the kind usual amongst Asiatics when alluding to other sects. At the siege of *Kej* they conducted its unsuccessful defence against *Mihrab Khan's* son, and the assailants killed or captured all its defendants, exhumed and burned the remains of their patron saints.

Professor Wilson, in his *Ariana Antiqua*, p. 141, mentions the *Dai* amongst other *Scythian* tribes as associated with the *Massagetæ*; and in a map attached to *Digby's* translation of *Quintus Curtius*, their position is fixed a little south of the *Jaxartes*. This coincidence of association with the *Sageta* and *Sakæ*, both then and now, is worth remarking.

The *Biadhiah* sect are Arab immigrants from *Oman*, residing in the town of *Gwadar* in *Baluch* and *Persian* Makran. They reject both *Osman* and *Ali*, and are regarded as heretics (*Kharji*) by both *Sunni* and *Shiah*. Like the *Shiah*, they practise dissimulation (*takiya*) in speaking of their faith. They drink wine.

Hinglaj or *Nani* is a hill in *Baluch* Makran 1800 feet high, and has one of the most ancient Hindu shrines existing. It is sacred to a goddess said to be *Parvati*, or *Mata*, or *Kali*. The *Muhammadians* regard the hill as sacred to *Bibi Nani*, probably the goddess *Nanaia* of the *Babylonians*; and the shrine is a well, the water of which at times rises up with a bubbling noise, and pilgrims reverence the rising bubbles by salaaming and throwing in their offerings. If an interval occur between the rising of the bubbles, the pilgrims call on *Mata* to appear. Animals are sacrificed at the shrine to *Kali*.

LANGUAGES in use in *Baluchistan*, are *Brahui* or *Kur-Gali*, *Baluchki*, *Jatki*, and *Persian*, but only the last-named is a written tongue. Considered as a whole, *Dr. Caldwell* regards the *Brahui* language as derived from the same source as the *Panjabi* and *Sindi*, but it unquestionably contains a *Dravidian* element, derived, in his opinion, from a remnant of the ancient *Dravidian* race having been incorporated with the *Brahui*. From the discovery of this element beyond the *Indus* river, he adopted the opinion that the *Dravidians*, like the *Aryans*, the *Græco-Scythians*, and the *Turco-Mongolians*, entered *India* by the north-west route. The *Brahui* language, according to *Mr. (Sir George) Campbell*, is mainly *Aryan* (*Indo-Persic*), with a *Turanian* element. The *Brahui* or *Kur-Gali* is spoken by the tribes of *Saharawan* and *Jhalawan*, from *Shal* or *Quetta* in the north to *Jhalawan* in the south, and from *Harrand* in the east to *Kohak* in the west. *Baluchki* is spoken by several of the *Jhalawan* and *Rind* tribes, as the *Minghal* and *Bizanju*, also by the *Brahui* *Khan* of *Kalat*, and by his sirdars or chiefs, who consider *Brahui* as vulgar.

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The structure of the modern Baluch language does not seem to warrant belief that any other than Persian was the parent stem. Philologists concur in opinion that the Baluchki is a tongue of the Aryan or Sanskrit stock, in which Persian, Sindi, Panjabi, and Sanskrit words recur; and that the Brahuiki belongs to the Scythic or Turanian, or Tamulian, or Dravidian stock. Lieutenant Pottinger mentions that the Baluch tongue partakes considerably of the idiom of the Persian, being at least one-half of its words borrowed from that language, but greatly disguised under a corrupt and unaccountable pronunciation. Dr. Latham classes the Baluch language with the Persian, but considers it as a modified form.

The Jat, who form the principal part of the population of Cutch Gandava, speak the Jatki language. Indeed, from Herat, Kabul, Kandahar, the Panjab, to Sindh and Cutch Gandava, between the Sutlej and the Ganges, the Jat everywhere preserve their own, the Jatki tongue.

The NORTH-WEST FRONTIER of British India, both beyond and within the British border, has many martial tribes, many of them with democratic forms of government. They may be thus shown:—

Independent Tribes along the outer face of the N.W. Panjab Frontier, and inhabiting hills—

Adjoining Hazara district—Hasanzai, 2000.

Adjoining Peshawur districts—Judoon, Bunoorwal, Swati, Kanizai, Usman Khail, Upper Mohmand, 16,000 to 19,700.

Adjoining Peshawur and Kohat districts—Afridi, 15,000 to 20,000.

Adjoining Kohat district—Buzoti, 500; Sipah, 300; Orakzai, 20,000 to 25,000; Zymukht, 5000; Turi, 5500.

Adjoining Kohat and Dehra Ismail Khan districts—Waziri, 20,000 to 30,000.

Adjoining Dehra Ismail Khan district—Sheorani, 10,000; Oahterani, 1000; Kuarani, 1200; Bozdar, 4000.

Adjoining Dehra Ghazi Khan district—Khutran, 3000; Kosah, 5600; Lughari, 5120; Gurchani, 2900; Murree, 3000 to 4700; Bugti, 1200.

The independent tribes are estimated to have about 128,000 fighting men, but there have been few instances of anything like combination among them, and the mountain hosts can only be kept together for a few days at a time, as each one has to carry his own four or five days' supply of provisions. After annexation of the Panjab, several independent tribes harassed the border tribes of British India, and expeditions were undertaken for their repression; but their leading men have, in later years, been able to retain their tribes to their agreements, and the British frontier is enjoying rest.

Barochi, a simple, inoffensive clan, numbering about 3000 families, who occupy the valley of Shorawak. Their camels are numerous. They are at enmity with the Baluch on their south.

Jadran, a Pathan tribe of Sumi Muhammadans who inhabit the eastern slopes of the main Suliman range. They are slightly made, but hardy, and small parties annually visit Banu and work as coolies. They are nomades, little above the savage state; have no cattle, tents, nor large towns, but travel with all their goods on their backs.

Kajakzai are descended from a Kakar chief, who fled to the vicinity of Sibi in Baluchistan. They number 700 to 1000 fighting men.

Khuttuk tribe, with 15,000 fighting men, occupy

the hills south of Peshawur to Kushalghar and Kalabagh on the Indus.

The Mangal is a considerable tribe in the southern and upper portions of the Kurum valley, and also those of the Zurnat. They are said to possess 200 forts, 500 black tents, and 8000 fighting men. They are said to be thievish. They have several sections.

Marwati or Maorati, a brave tribe of Pathans in the Marwat division of the Banu district, numbering 42,725 souls in 1868, with fighting men estimated at from 5500. They are one of the finest races, Trans-Indus, tall, muscular, fair, and often rosy-checked. They are of pure Afghan blood, a branch of the Lohani tribe. Their khel or sections are the Bahram, Dreplara, Musa, Tapi Nuna, and Jhandu. They are bold, manly, simple, and upright, deeply attached to their sandy villages and reed huts, frank and friendly with strangers. Their country is arid; they have few wells, but form tanks, and one village has to go 14½ miles for water.

(*Kafiristan*, called by its own people Wamastan, is a country on the north of Afghanistan, bounded by the crest of the Hindu Kush between Kashkar ridge and the Farhan ridge, and occupying the valley of the Chigar Sarac. The race occupying it are known as the Siah Posh, lit. black clothes, and in the Chigar Sarac are independent. No European has visited the race. The soil of the valley is fertile, producing wheat and barley, and the mountains are clothed with forest trees, the growth of ages. Cultivation is carried on by the men and women, who till, sow, and reap, using a pointed stick of hard wood, and a three-pronged fork; they have oxen where the country is open, but the hill tracts are terraced, and the soil is turned with hand labour. The principal crops are sown in spring and reaped in autumn. They export a few slaves and forest products, and import small-wares. They levy a tax (Kulang) on the Muhammadans and Nimchah on their borders. Kafir slaves are much prized for their fidelity and courage, and the Barakzai family retained them as their confidential body-servants. The labouring tribe amongst them is called Bari. They erect rope bridges across the streams and ravines, of ropes made of goats' hair. The form of government is that of patriarchal republic. They practise the vendetta, they make forays, and kill all Muhammadans whom they encounter.

The Siah Posh have been conjectured to be descendants from the Greek followers of Alexander, also from the Arab tribe of Korsh, but Lumsden supposes them to be aborigines driven from the plains. Their language is of Sanskrit origin. They have several tribes, amongst whom are the Katti, Kanoz, Waegal, and the Kam or Kampar. They are fair, some of them with blue eyes, but others with Mongoloid features. They are social, drink wine freely. They are polygamists. The ages for their marriages are, for men, 20 to 25 years; and women, 16 to 20. Women are kept in a separate building periodically, also on childbirth, both of these being Hindu customs. The dead are placed in a box, which is left on the top or side of a hill, which is a Tibetan and Zoroastrian practice. They are idol-worshippers, the figures being those of a man or woman. Dogan is their chief deity; and Mahadeo, Bruk, Kantaar, Pane Truskai, and Eumrai are his incarnations.

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The Uthah is a priestly class, and the Dil are sooth-sayers. They sacrifice sheep, goats, and cattle. They eat everything except carnivorous animals. They sit on chairs and stools, like the people of Lughman and the Khugiani. They ornament their houses with carvings. Timur in A.D. 1398, Sultan Muhammad Mirza in A.D. 1453, Baber A.D. 1507, and others, made inroads against them, but with only doubtful successes. Some of them, in the time of the Emperor Jahangir, were converted to Muhammadanism. The Chanak tribe inhabit the valley of Mukah, west of Islamabad in Lamghan, and S. of Duhmiah in the Sakal Dara; they have become Muhammadana. The Duhtuk principally occupy the country on the borders of Chitral.

The Kafir race occupy the most inaccessible portions of the Indian Caucasus between the Bajawar, Kashgar river, and Bamian, in the mountainous region of Northern Afghanistan, with Bajur and Kuner on the south. Kafiristan is bounded on the west by the Belut Tagh, on the east it touches Chinese Turkestan and Little Tibet, to the south lies Afghanistan, and to the north Khokand or Farghana, where the population is Chaghtai Turk. They are independent, have defied all attempts at reduction, their enmity to Muhammadans has been inveterate and unceasing, and they give no quarter; but of the Kafir clans, 18 in number, 8 have now become Muhammadans.

The Kafir are fond of honey, wine, and vinegar, music and dancing, the sexes dancing apart. They have no written character, and are said to speak a language resembling Pushtu. They wear a lock of hair on the right side of their heads. They are persecuted by all the surrounding nations, who seek to capture them as slaves. Their women do all the out-door work, and follow the plough. The exposure of the dead adopted by the Siah Posh has contributed probably to their being suspected to be a remnant of the reformer Zertusht, but in no account is the least mention of fire-worship amongst them. The marriage ceremonies are extremely simple, consisting merely of procuring two twigs or rods, of the respective height of the bride and bridegroom, and tying them together. They are then presented to the couple, who preserve them with much care, so long as they find it agreeable or convenient to live together. If desirous to separate, the twigs are broken and the marriage dissolved. The Siah Posh build their houses of wood, of several storeys in height, and much embellished with carving. These accounts are trustworthy, as we witness that the Safi of Kaziabad, in the hills west of Lughman, and who have been converted, actually reside in such dwellings. Their arms are bows and arrows, long knives and daggers.

Khaibar District.—One of the most northerly of the passes beyond the British frontier leads through the Khaibar mountains. It is 18 miles in length, leading from Peshawur towards Kābul. As it approaches the northern outlet, it becomes more formidable. The pass is of an irregular form, but the average breadth is about 1500 paces; the hills which border it may be about 700 feet high. The Afridi, Shanwari, and Mohmand are the chief tribes in its vicinity. Nadir Shah paid a sum of money to secure his passage through it. The Daurani rulers of Kābul also acknowledged certain of the Afridi and Shanwari to be real passmen, and paid five Afridi clans, Zakha Khel, Sipah, Kuki Khel, Malik Din Khel, and Kambar Khel, also paid

the Loargi and Singu Khel of the Shanwari. The British, likewise, from their first invasion of Afghanistan, have paid the passmen to keep the Khaibar clear.

The *Shanwari* inhabit a portion of the Khaibar mountains, some of the eastern valleys of the Safed Koh, and are also found on the borders of Bajawar. They have five sections—Abdul Rahim, Ali Sher, Sangu, Sipai, and Manduzai. They have been continuously predatory since the British approached their borders. They are the most industrious carriers between Peshawur and the other marts on the way to Kābul, using mules and camels for carriage. They are stalwart and hard-working, but inveterate thieves.

The Lowaghar Shanwari have three sections near the British territory, with 1050 fighting men.

The Tirai tribe live among the Shanwari; they speak a language differing from that of their neighbours.

The *Afridi* are a large and very important tribe. They inhabit the lower and easternmost spurs of the Safed Koh range, to the west and south of the Peshawur district, including the valley of the Bara and portions of those of Chura and Tira. To their east they are bounded by the Khatak of Akora and the Mohmand and Khalil divisions of the Peshawur district; the Mohmand are on their north; to their west are the Shanwari; and the Orakzai and Bangash are on their south. They claim descent from Khalid ibn Walid, a Jew who embraced Muhammadanism, but take their name from Afrid, who, in the 10th century, at the time of the advance of Mahmud, fled for refuge to the wilds of Sheratala.

Their clans or khel, and the strength in fighting men, are as under:—

Kuki,	3500	Zakha,	4000
Malik Din,	3500	Aka,	1200
Kambar,	3500	Sipah,	1500
Kamr,	1500	Adam,	3500

These give their names to the divisions of their country. In the northern portion of their country is the Khaibar range, barren, rugged, and inhospitable to the last degree; to the south is the watershed of the Bara river.

The Afridi is the most important tribe of all on the Panjab frontier. Their country is about 80 miles long, and, on the average, 8 miles in breadth, and mountainous throughout. One or two thousand of them are serving as soldiers in the Bengal army and Panjab Irregular Force. The Afridi in appearance are fine, tall, athletic highlanders, whose springy step, even in traversing the dusty streets of Peshawur, at once mark their mountain origin. They are lean but muscular, with long gaunt faces, high noses and cheek-bones, with fair complexions; they are brave and hardy, and make good soldiers, but are subject to home-sickness. They are careful shots and good skirmishers, but their speciality is hill fighting. Lieutenant-Colonel Edwardes, detailing the occurrences in the Peshawur district during the Mutiny, mentions as an instance of the strange things that happened in those days, that one morning 500 Afridi of the Malik Din Khel (who were in disgrace and under blockade) marched from the hills into the cantonment, armed to the teeth, and said they had come to fight for the British and be forgiven. He accepted them at once, and they repulsed the first assault of the 51st Bengal N.I. when it rose, and then formed the nucleus of one of the Panjab regiments.

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The Afridi round the Kohat pass are carriers and traders, and cut and sell firewood. They occupy the mountains in summer, living in moveable mat huts; but, as winter draws near, they descend to the Khaibar, Bazar, Kajurai, Bagiara, and Lower Bara districts, and the low valleys and hills bordering on the west of the Peshawur basin, in order to avoid the snows of Maidan, which is 7500 or 8000 feet above the sea; Dwatawi and Tordara being about 6000 feet. None of the Afridi clans are found west of the Safed Koh or Rajgal ranges. They have the command of the Khaibar and Kohat roads. The Adam Khel Afridi are located in the hills and glens westward of Jalala Sar; and in the glens on each side of the defile leading from the Peshawur valley to Kohat, it holds the entire pass in its grasp. They are permanent residents in villages, strengthened by towers, possess many camels, and are large carriers of salt.

The Adam Khel Afridi is their largest and most powerful clan, has always been quite independent, and has never acknowledged any authority. Their possession of the Kohat and Jawaki passes have given them great importance. They are separated from the great body of the Afridi. Their sections are the Gali, Jawaki, Hasn, and Asha Khel, who can muster 4540 fighting men.

The Hasn Khel, of the Adam Khel Afridi tribe, are in two great sections, the Akhorwal or Tatar and the Janakhori, and can muster 1900 fighting men from their five villages. After the punishment of the Bori in 1853, they submitted; they subsequently gave annoyance, and again, in 1867, tendered submission.

The Jawaki Afridi live in 22 villages in the hills to the east of the Kohat pass, and from time to time, up to the year 1878, have given great trouble to the British. They have, according to Major Cavagnari, 18 khel, according to Major Coke 7 khel, with about 1000 fighting men. They are almost the sole wood carriers of Kohat; they possess many camels. Their importance is increased by the circumstance of their holding the Jawaki pass, for which they get Rs. 2000.

In 1853, after the assassination of Colonel Mackeson, an expedition was sent against the village of the Bori section, 33 miles N.E. of Kohat. The force was 1532 strong, under Brigadier Boileau, and that village was destroyed, with a loss of eight killed and twenty-nine wounded on the British side.

The Kambar Khel, in the Maidan of Tira, have two divisions, with ten subdivisions. The Kamr Khel are mostly scattered about the hills south of the Dwatawi pass to Tira Maidan.

The three sections of the Malik Din Khel are in the central portions of the Tira Maidan.

The Zakha inhabit the Khaibar pass from Gargora to Garhi Lal Beg. They are the most important and most powerful of all the Afridi clans, and can muster between 4000 and 5000 fighting men, and have eight subdivisions, viz. Bari, Khasrozai, Mohib, Paendah, Pakhai, Zaodin, Nasr-u-Din, and Shan. They move in summer to Maidan and Bara, and in winter dwell in the caves and hamlets of Bazar and Khaibar. The Kin Khel have their summer quarters in Bar Bara and Tordara, and winter in the caves of Kapirai, and to the mouth of the Khaibar.

The Ashu Khel are located to the south of Fort

Mackeson, on the first range of hills, and in the Uchalgada valley. They live in five villages, and can muster 700 matchlocks.

The Afridi of Janakhwar are the best of the Afridi, bold and intrepid in action.

The Aka Khel are in the dreary hills to the S.W. of Peshawur, from the Bara river to near Akhor, going to Tira in summer, in winter living in caves. They are of a reddish-white colour, with strong physique, and are notorious for theft and robbery.

The Sipah section of the Afridi have three clans,—the Abu Bakr, Hormaz, and Landi Khel, and can muster about 1500 fighting men. They have nine villages in Bara, between the Kamr and Zakha Khels, but separated from the Zakha by the long range of the Surghar hills. They winter in the caves of Kajurai, near Gandao and Mehmani.

The Mohmand tribe are partly British subjects, occupying a subdivision of the Peshawur district immediately south of Peshawur. When the Mohmand tribe immigrated from the west, the ancestors of this Peshawur clan advanced and dispossessed the Dilazak, and have since had no further connection with the main body, who located themselves in the hills to the N.W. of the Peshawur valley, between the Kabul and Swat rivers. This main body are independent, and have six clans,—the Baizai, Tarakzai, Halinzai, Khwazai, Utmanzai, and Dawezai, each with many subdivisions. The strongest in fighting men is the Baizai, who are estimated to have 12,000, while the total strength has been stated at 19,700; and Ahmad Sher gave their numbers at 35,000, but it is probable they could never bring 16,000 into the field. The Mohmand country is rugged and unfruitful, the natural resources few, and mats are the sole manufacture. Like all Pathans, they boast of Pathan honour, but it is believed that they would sell, or prostitute, or kill any one for gold. They have no literature. They do not take service in the British army so readily as the other tribes. Three of their clans are known to the British,—the Pindi Ali, the Alamzai, and the Michni Mohmand. The last of these, the Michni Mohmand, after annexation, were allowed to hold from the British Government a fief or jaghir in Doaba, the fertile triangle near the junction of the Swat and Kabul rivers, of which they collected the revenue. A portion of the lands they themselves cultivated, and farmed out the remainder to other tribes of the plains as tenants. Many of their clansmen dwell in the neighbouring hills, and others traded in the Peshawur valley.

The Alamzai Mohmand, whose headquarters are at Gandao in the hills, also held a fief of Panjao, in British Doaba, chiefly cultivated by tenants. A few of their clan lived on the plains, but the majority in the hills.

The Pindi Ali inhabit a very strong locality in the hills; at a former period, prior to British rule, they had held a similar jaghir in Doaba, which, like other fiefs, had been granted by preceding Governments as black-mail, to buy off depredation. They belong to the Isa Khel and Barhan Khel subdivisions of the Tarakzai clan. They were the worst behaved of all the Mohmands, and for eleven years after the British occupation of the Panjab, they worried the British border. They could muster about 2000 fighting men. For the first

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eight years, the Mohmands gave more trouble than any other of the Peshawur border tribes. In December 1850, they made an inroad on the village of Shabkadr; in March, August, and October 1851, the Michni Mohmands were aggressors; and on the 25th October, a force, under Sir Colin Campbell, was sent against them, and was variously engaged till the middle of December, by which time a fort had been erected to hold them in check, and the force returned to cantonments. In the following July (1852) the Michni and Panjao Mohmands, having been exiled from house and lands, and cut off from trade and all communication with the plains, tendered their submission, and their siefs were restored. In the autumn of 1854, the Michni Mohmands again misbehaved, and in September Colonel Boileau led a force against them, and destroyed some of the villages, which fired on the troops as they moved along the open ground. They continued to misbehave, and made eighty-three raids and attacks on British territory between 1855 and 1860; but they at length submitted to Lieutenant-Colonel Edwardes, who had written to Saadat Khan that he desired the honour and welfare and strength of himself and family. From that time until the Ambela expedition of 1863, the Mohmands abstained from troubling the border. But Sultan Khan, son of Saadat Khan, then collected about 3000 Mohmand, Safi, and Bajawari, and they were met at Shabkadr by Captain Earle with 55 of the 6th Bengal Cavalry and 100 Native Infantry. Lieutenant Bishop charged and fell, but the enemy lost about 28 killed and wounded, and retired to Ragmena and Candao. But by the 1st January 1864, Sultan Muhammad had gathered around him about 4500 Mohmands, and advanced beyond Shabkadr. Here, Colonel Macdonell, C.B., met them with 3 guns, 477 cavalry, and 1272 infantry, and defeated them with a loss of about 100 killed and wounded, and they dispersed to their homes. One of the wives of Sher Ali Khan, the Amir of Kabul, was a daughter of Saadat Khan. The Michni Mohmand murdered Lieutenant A. Boulnois, R.E., near the fort of Michni, on the 14th January 1852, and near that place Major Macdonald was murdered by them on 21st March 1873, for which there was no motive. The numbers of the fighting men the Mohmand clans could turn out have been given as 19,700, viz. the Baizai clan, 10,000 to 12,000; the Khwazai, 800; the Tarakzai, 2500; the Halinzai, 3000; the Utmanzai, 500; and the Dawezai, 900.

The Shalmani race inhabit the village of Shalman, on the Tartara hill in the Khaibar range. Elphinstone says they are originally from Kuram, were afterwards in Tira, and again in Hashtnuggur.

The Mula Guri tribe of 500 families, on the north slopes of the Tataru mountain, on the Peshawur frontier, are notorious thieves.

The Black Mountain is at the N.W. extremity of the Hazara district. It is a long narrow granite ridge of nearly uniform height, with higher peaks at intervals, and occasional deep passes. Numerous large rocky spurs project from the sides, which are often precipitous; the routes to ascend the mountain being along the spurs from British territory, are those of Tanawal and Shunglai, Chata, Agror, Chajri, Barchar, Khun, and Gali. The more prominent passes and peaks are as under:—

Pabal Gali, . . .	6930 feet.	Ganther, . . .	9572 feet.
Pinja Gali, . . .	7772 "	Kanesar, . . .	9775 "
Akhun Baba- ka-Chura, . . .	9157 "	Kali Gali, Jab- rai, Chakra, . . .	} Not ascertained.
Machai, . . .	9803 "	Chita Bar, and Doda, . . .	
Khand-ka-Dana, 9429 "			

The view from Machai is grand. The jungle on the lower S.E. slopes consists of *Berberis* and *Acacia modesta*; at 6000 feet the *Pinus longifolia* and *Pinus Webbiana* begins, *Abies deodara* and oaks. The poplar and plane grow in the valleys. The Indus runs deep and rapid under the western foot of the mountain, and is there from 70 to 300 yards wide. In its course there are eleven ferries, with boats large enough to carry twenty to thirty passengers, and the natives all along cross it on inflated skins (*Shina* in Pushtu). The tribes of the mountain (from N. to S.) are the Hasan-zai, Akozai, Chagharzai; N. of Agror, on the E. face, are the Syud of Pariari and the Swati of Deshi. The Hasan-zai and Akozai, the bravest, belong to the Isazai branch of the Yusufzai; and the Chagharzai, the most numerous, to the Mahzai branch. The Hasan-zai adjoin the frontier of the Hazara districts of the Panjab. They reside on both sides of the Indus, those Cis-Indus living on the Black Mountain, and those Trans-Indus immediately opposite to it. They have ten khel or clans, who could furnish 1115 fighting men; and the other races who are living amongst them—the Tili, the Gujar, and craftsmen—could furnish 600 more. Every man possesses a sword and shield, and there are said to be 1100 matchlocks in their tribe. In 1851, Mr. Carne and Mr. Tapp, two officers of the customs, were led into an ambuscade formed by the Hasan-zai, near the Jhandrani ravine. Mr. Carne parleyed with their leader, who swore that if they delivered up all their property, their lives would be safe; but though agreed to, the Hasan-zai bound the two officers, and, taking them a little off the road, cut their throats in cold blood. In December 1852, a force marched to punish the Hasan-zai. It was in three columns, under Lieutenant-Colonel Napier (now Lord Napier of Magdala), Major Abbott, and Major Davidson; and from the 20th December to the 2d January, the British forces were engaged. The Hasan-zai behaved bravely, defending their ground step by step, and gaining temporary advantages, but inflicting little loss on their British assailants. In August 1863, 500 or 600 Hasan-zai made a raid on the Tanawal villages of Shushi, Chumiar, Bandi, Nawashah, Jrabu, Dargarian, and Bai, burning them and carrying off some cattle. But they entered into agreements to be peaceful, and they adhered to their promises, until a section of them attacked the Oghi Thannah on the 30th July 1868. They were afterwards parties in all the Agror attacks during August, but submitted when General Wilde's force advanced up the Black Mountain.

The Chagharzai and Hasan-zai are the first Pathan neighbours of the British to the north, inhabiting a mountain tract on the east bank of the Indus, known as the Black Mountain. The Chagharzai inhabit both banks of the Indus above Buner. They are said to have above 7800 fighting men, and are in three clans,—the Nasrat, Firozai, and Basi Khel. Their spring (rabi) crops are wheat, barley, masur, and tobacco, and their kharif or autumn crops, maize, rice, and mat'h beans. Their

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wealth is in cows, buffaloes, and goats. They are thorough mountaineers, hardy and brave above all the neighbouring tribes.

Passing to the west of the Indus are the Mudah Khel and Amazai. The Mudah Khel are to the north of Amb, the principal town of the Tunawal chief.

The Mahaban mountain infringes on the Indus, where it washes the British frontier district of Hazara. The Mahaban has many tribes around it. It is a peak in the extreme corner of the Yusufzai country. It is on the right bank of the Indus, at the east end of the spur of the Ilam range, which divides the drainage of Buner from that of the Yusufzai plains. It is clothed with forest trees, chiefly fir, with luxuriant herbage, and is generally suited to the requirements of a pastoral race; it is also terraced and cultivated.

The Amazai inhabit the eastern slopes of the Mahaban mountain.

The village of Malka, in the Amazai country, is situated on a plateau on the N.W. of the Mahaban mountain, and was selected by Hindustani fanatics as a settlement. On the inner side of Mahaban it has easy communication with the Amazai, the Mada Khel, Chagharzai, and Hasanazai; and the Khudu Khel, Utmanzai, and Jadun are close at hand and easily reached. In 1863 an expedition was sent to destroy Malka, from which resulted a campaign in Ambela, and the Bunerwal ultimately undertook to burn Malka, and expel the fanatics from Buner, Chamla, and the Amazai lands.

Following the west bank of the Indus to the Pihur ferry, we come to the amphitheatre of hills which environ the Peshawur district, in which are a considerable number of tribes. The Jadun or Gadun are the first nearest to the Indus, cunning and intriguing. After them are the Buner or Bunerwal, the Swati, the Mohmand, and Bajauri, who opposed the British in the Ambela campaign.

The Jadun or Gadun of Gadunia dwell south of the Hasanazai, partly on the slopes of the Mahaban mountain, partly in the Hazara district. They are supposed to have been a clan of Kakar Afghans who had been driven to take refuge in the Safed Koh, and afterwards in Hazara and Chach. They have two divisions,—the Salar, who possess 12 villages of 2530 houses, and the Mansur of 18 villages. None of the villages are walled, but a few have towers. The tribe are cultivators and cattle-owners, and their buffaloes are celebrated. They boast of having 12,000 fighting men, but about 2800 is the supposed true number they could turn out. In 1861 they annoyed the British frontier by sheltering Hindustani fanatics at Satana, but they entered into an agreement to live peaceably. Subsequently, however, they invited the fanatics to return, and on the 15th July 1863 they were subjected to a blockade; and Colonel Wilde, C.B., led a force against them, arriving at Maini on the 30th December, and on the 5th January 1864 fresh agreements were entered into. Their conduct continued to be so unsatisfactory, that on the 15th June 1870 they were again blockaded. During July and August they kept the border in agitation, but on the 10th September they came to terms, their Jirgah or council agreeing to pay a fine of Rs. 3285, and give security for Rs. 1500 more. A few of the Jadun are serving as soldiers in the British Indian army.

Satana.	Swat Races, viz. :—	Ranizai.
Ambela Pass.	Panjhora.	Deshi.
Laluani.	Akozi.	Garwi.
Swat River.	Khwarzozai.	Maturizai.
" Kohistan.	Osman Khel.	Musa Khel.
" Pases.	Bajawar.	Nakbi Khel.

Satana is a village on the right bank of the Indus river, at the east foot of the Mahaban mountain, 13 miles above Topi. The village was originally made over by the Utmanzai to Syud Zaman, from Takhta-band in Buner. His descendants allied themselves to Syud Ahmad, who settled in Satana, and they aided him in all his ambitious struggles to establish a Wahabi empire of Muhammadan reformers on the Peshawur border. The ablest of the Satana Syuds was Syud Akbar, who, in 1849 or 1850 was chosen to be badshah or king of Swat. He died in May 1857; and two leaders rose, viz. Syud Mubarak Shah, a son of the deceased Syud Akbar, and Syud Umar, who kept a gang of thieves. The refugees from Hindustan had one or two mulvi, but no one of reputation. Not content with the church lands, the Syuds of Satana demanded tithes from the Utmanzai, who resisted their attempt to cut their grain crops. Syud Umar was shot, and Syud Mubarak was wounded in the foot, and the Syuds and men of Hindustan were expelled. After the destruction of the Hindustani settlements at Mangal Thana, a force under Sir Sydney Cotton, in 1858 attacked and defeated them, destroying Satana. Also, in 1863, on its removal to Malka, on the opposite slopes of the mountain, on the 26th of August 1868, a large body of the Swati attacked and defeated the Wahabi Hindustani, and drove them into the country of the Chagharzai, Trans-Indus, east of the Buner valley.

The Ambela or Surkhawi pass leads from the Sudum valley, Peshawur district, into that of Chamla. Steep mountains rise 1000 feet, absolutely precipitous. In 1863, General Chamberlain's brigade, 5000 strong, was opposed on the pass by nearly all the fighting strength of the Yusufzai clan, 15,000 strong, under the Akhund of Swat, the chief of Panjkora, and other leaders. The object of the British was to drive the Hindustani fanatics from Malka. The operations lasted from the 20th October to the 25th December 1863. The loss to the British was 227 killed, amongst whom were 15 British officers, and 620 wounded, of whom were 21 British officers. Generals Chamberlain, Wilde, and Garcock commanded.

The Laluani is a Baluch tribe inhabiting the village of Lalu, on the crest of the Ambela ridge, 8 or 4 miles east of the pass.

The Swat river runs through the Swat valley. This valley is about 70 miles long, but its breadth varies from a few hundred yards to 10 miles. Its three subdivisions are Ranizai, Kuz or Lower Swat, and Bar or Upper Swat. The valley is highly cultivated and densely peopled, producing rice, beans, barley, wheat, Indian corn, fruits, sugar-cane, cotton, and tobacco. The people are bigoted Sunni Muhammadans, with as many factions as there are villages. Their religious leader for many years was Abdul Ghafur, styled the Akhund, who was revered from the Indus to the Kuram. Swat valley is intersected by ravines and glens, bringing down the drainage of the bounding ranges. It is unhealthy in summer. The occupants are Afghans, Mulla, and Syuds. The total population is estimated at 96,000 souls, and

consists almost entirely of Baizai, Khwazozai, and Akozai. The Kohistan of Swat is above Chacorari. The head of the Swat valley is occupied by the Torwal and Garwi tribes, who speak a language different from Pushtu, which, however, they understand. They are probably allied to the Kafir, Chitral, and Gilghit races. Beyond Swat and Bajawar is Kafiristan.

Towards the lower extremity of the Swat valley, a formidable range of hills bounding the valley runs for many miles from east to west, nearly parallel to the British frontiers; and at the eastern extremity of this range stands the Mora mountain. Between this range and the frontier, however, intervene two tracts, named Ranizai and Lower Osman Khel, both quasi-dependencies of Swat.

The best of the passes leading into Swat is one named Mullakund, which opens from Ranizai. A little farther to the eastward of Ranizai also there are some passes leading into the Lunkhor valley, which belongs to British Yusufzai. These latter passes are not available for passage from Swat to British territory, because leading into Lunkhor they can be stopped by any party holding that valley. The passes via Ranizai and Osman Khel, if the people of those tracts accord a passage, lead straight on to the British plains of Hashtnuggur. Above the Lunkhor valley, just beyond the British frontier, is the strong village of Pullee.

The subdivisions of the Peshawur district, adjoining the tribes above described, are Lunkhor or north-west corner of Yusufzai, and then Hashtnuggur.

Of the Swat, Ranizai, and Lower Osman Khel tribes, the two latter are subordinate to the former.

The Swati race inhabit portions of the Swat valley and of the valleys of Tikri, Alahi, Deshi, Nandihar, Pakli, Konah, Bogarmang, and Agror, Balakot, and Garhi Habib-ullah, north of Hazara. They are sometimes called Dehgan, and seem to be of Indian origin, and to have formerly ruled between the Hydaspes and Jalalabad, but they have been dispossessed of their lands by the Pathans. They have no connection with the Yusufzai Pathans who now occupy the Swat country. They are of poor physique and of low courage; they appear to have all the vices of the Pathans, and, as with them, cold-blooded murder and grinding avarice are the salt of life. They are all Sunni Muhammadans, and very bigoted.

Panjhora consists of a number of narrow and hill-bound valleys, inhabited by the Malizai, Khwazozai Akozai, and Yusufzai. The climate is severe in the north, but mild in the south, and the district fertile. The Panjkora river divides it from north to south.

The Akozai are a grand division of the Yusufzai tribe, comprising the Baizai and Khwazozai clan, who inhabit the Swat valley. The Akozai are estimated at 90,000 souls.

The Khwazozai are a section of the Akozai Yusufzai.

The Malizai section of the Khwazozai Akozai and Yusufzai occupy the country of Panjkora, which also takes their name. They can muster 8000 fighting men.

The Kohistan of Malizai is a glen at the head of the Malizai drainage. The people are supposed to have been Kafirs, converts to Muhammadanism.

The British Baizai district is a bay about 20 miles long and 12 miles broad, which runs into the hills between the Paja and Malakhand ranges at the extreme N.W. of the Yusufzai division of the Peshawur district. It is inhabited by Baizai, Swati, Utman Khel, and Khatak, with some Mohmand, Rowanri, etc. The last of these claim to be Pathans, and there is no great family of khans in Baizai. On the 11th and 14th December 1849, Colonel Bradshaw led an expedition against those in British territory, in which he attacked and destroyed the villages of Sangao in British Baizai, and Pali Zormandai and Sherkhana in Swat Baizai.

The Baizai division of Swat is south of the Mora range and north of Lunkhor. It is called Sam Baizai, to distinguish it from Baizai in the Swat valley, and comprises the villages of Pali, Sherkhana, Jalalpur, Zormandai, Bazlara, and Mora Banda, each with its separate khan.

Gujar herdsmen are in hamlets scattered over the Mora mountain.

The Osman Khel or Utman Khel are a Pathan tribe who occupy the hills north of Peshawur, between the Mohmand and Ranizai, on both sides of the Swat river, from the Koh-i-Mora to the Khanora mountain. They are descendants of Utman Baba, who accompanied Mahmud of Ghazni on his expedition into Hindustan in the year 997, and settled in this country. They have five khel or sections, descendants from his five sons. They are a powerful tribe, and, according to Turner, can muster 17,000 fighting men; Mount Stuart Elphinstone says 10,000, and Bellew 5000. Their country is very hilly generally. They are all at feud with the people of Bajawar; in 1827 and 1850 they engaged the Mohmands. They are a tall, stout, and fair race, are sober but uncivilised, and have frequent quarrels amongst themselves. At first they gave much trouble to the British frontier, and in 1852 afforded an asylum to and aided the fugitive Khan of Tangi; on which a force under Sir Colin Campbell proceeded against them in May, and their principal villages, Pranghar and Nawadand, were taken and destroyed after a determined resistance. Since then the Utman Khel have never given any trouble.

The Utman Khel or clan who inhabit the northern portion of the Baizai division of Yusufzai are probably a section of the above tribe. They have three clans,—Ismail, Daulat, and Shesada. Their villages are strongly situated in the nooks and corners of spurs running down from the Paja and Mora ridges, and the people are as wild as the hills they inhabit. Their conduct has been, on the whole, more consistently mulish and refractory than that of any other village along the whole border from Abbottabad to Jacobabad. They began to give trouble in 1847, and up to 1872 they continued in it. In 1849 a force under Colonel Bradshaw destroyed the village of Sangao belonging to the Dawat Khel. In 1855 the same village was fined Rs. 200, on account of some robberies and molestations of travellers, and the village was removed from its hill position, and its two sections located respectively in the more accessible villages of Pipal and Mian Khel; but during the troubles of the mutiny they crept back again. In 1859 they sheltered some criminals, and opposed the attempt made to seize them. In 1863 six of their villages furnished men to oppose

the British force which was sent on the Ambela campaign, and they were fined Rs. 2500; after which they were disturbed by intestine factions, with regular fights on the 21st August, 25th and 29th September, 3d and 21st October 1864, in which the British did not interfere. In November and December Lieutenant Ommaney unsuccessfully endeavoured to induce them to make peace; but in February 1865 Captain Monro was more successful, and fines were imposed. In 1865 quarrels broke out afresh among them, and on the 16th January 1866 a force of 4000 men and 12 guns, under Brigadier-General Beresford, C.B., was sent amongst them. The villages of Mian Khel and Sangao, and other villages, were destroyed, and new sites fixed for them. In 1872, however, some of the clans evacuated the villages of Kui, Barmul, and Mian Khan, and as they refused to return or to obey the authorities, the houses of the Kui ringleaders were pulled down.

The Ranizai are a subdivision of the Baizai Akozai division of the Yusufzai clan. The country they inhabit is divided into the Sam Ranizai and Bar or Swat Ranizai. The latter is the lowest or most westerly part of the Swat valley, in which they have thirty-five villages. Sam Ranizai is an extensive district, stretching over the Totai Hills, and includes the whole of the lower end of the Swat valley, in which there are about thirty khel or clans. On the annexation of the Panjab in 1849, it was found that the Sam Ranizai country was being made a refuge for malcontent criminals of every description, who periodically made raids on British territory. In 1852 the Ranizai Swati attacked a detachment of the Guide Corps, and a force under Sir Colin Campbell was marched to their village, on which the Ranizai maliks of Shahkot submitted, were fined Rs. 5000, and gave ten hostages. The force then marched towards the British territory; but as the Ranizai refused to pay the fine, and repudiated the hostages, whose families they expelled from their territory, on the 18th May Sir Colin returned to Shahkot, and found his force opposed by about 4000 infantry and 500 cavalry, all from Swat, in addition to the armed villagers. The king and the akhund of Swat had stationed themselves on the crest of the Malakand pass to witness the fight. After a slight resistance, the Swat troops broke and fled, leaving 300 of their number dead on the field. The village and its granaries were then destroyed, and from the 20th to 24th twelve other villages were similarly destroyed, and the British force returned through Lunkhor to Gujargarhi. In June they tendered submission, and all that was required of them was to behave peaceably. Since that time the Ranizai people have fulfilled all their engagements, and have evinced an anxiety to maintain peace.

The government of Swat, like that of all Pathan tribes, is a most complete democracy. The country is split up into as many factions almost as there are villages, and even in these there are often several sections. But the late akhund, Mullah Abdul Ghafur, working on their religious feelings, was able to induce them to combine, and he used all his power to prevent collision with the British Indian Government.

Abdul Ghafur, the akhund, was born in the village of Syedassam in Buner. He was poor, and

for twelve years studied for the priesthood in the village of Beka in Yusufzai, living on shamak and milk, and he subsequently became a disciple of the Mian of Kaku Khel. He returned to Buner, and afterwards went to Swat, where he was revered for his sanctity, and was always consulted by the Swat people. He recommended them to select Syud Akbar of Satana as their king. When that ruler died, on the 11th May 1857, his son, Syud Mubarak Shah, made unsuccessful efforts to succeed him, and, being expelled from Swat, he, with mutineers of the Bengal N.I., settled in the valley of Panjar, which adjoins the Yusufzai side of the valley of Peshawur, where they founded a Wahabi colony, headed by Mulvi Muhammad Inayat.

The Pathans of Swat are hospitable; the men are spare and apparently feeble; the women are strong, stout, and buxom, and enjoy more liberty and rule the men to a far greater degree than is known amongst other Pathans.

Deshi, a clan of the Swati on the eastern face of the Black Mountain. They have 720 fighting men. Other tribes, Zizrari, Syud, Mula, Akhun Khel, and Gujar, have settled amongst them.

Garwi, a Kohistani tribe inhabiting the head of the Swat valley, and numbering about 3000 adult males. They are not Afghans, and have a distinct language.

Maturizai, a section of the Baizai Akozai Yusufzai on the east bank of the Swat river. Their two sections are the Balol Khel and Ala Khel.

Musa Khel, a section of the Baizai Akozai Yusufzai on the left bank of the Swat river.

Naikbi Khel, a section of the Khwazozai Akozai Yusufzai on the right bank of the Swat river. They have 6000 fighting men.

Orakzai, Bazoti, Sipah, Zaimusht, and Turi adjoin the Kohat district of the Panjab. The Orakzai inhabit the mountainous country to the north and west of the Kohat district. Their country is called Tira. It consists of the Khankai and Mastura or Tira Toi valleys. The Tira mountains are spurs from the Samana range and from the Safed Koh, and of 5000 to 7000 feet of elevation. The people are all Orakzai mountaineers, wiry, martial, deceitful, cruel, and avaricious. They migrate for the winter with their flocks to the low levels of the Kohat and Tiri hills about Miranzai.

The Orakzai have the Afridi on their north and east, the Kohat district bounds them on the south, and the Safed Koh on the west. Their chief sections are the Daulatzai, Ismailzai, Laskarzi, and the Hamsaya, and they can furnish 28,870 fighting men. In 1855 they caused trouble in the district adjoining them. On the 30th April, 1500 or 2000 of the Afridi and Orakzai were driven off from an attack on General Chamberlain's camp at Darsamand. In 1868 and 1869, they again gave trouble, till Colonel Keyes advanced against Garo in February 1869, and destroyed it on the 25th February, since which time they have been quiet. Garo was a mere collection of caves.

Rabia Khel section of the Ismailzai Orakzai was the most prominent of all the Orakzai in the disturbances on the Miranzai border in 1855. From April to August 1855, they committed eighteen raids. They occupy the crest and north ridge of the Samana range. Fighting men, 600. They were punished by a force under General Chamberlain.

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The Daulatzai section of the Orakzai inhabit the corner of the Afridi hills, near the Afridi and the Kohat district. Their sections are the Bazoti and the Usturi Khel, each 500; the Utman Khel, 600; the Mani Khel and Firoz Khel, each 800; the Sipah, 300; the Abdul Aziz Khel, 400; and Bar Muhammad Khel, 1000.

Bazoti inhabit the corner of the Orakzai country between the Afridi and the Kohat district. They have several khel or clans, which are said to number 500 fighting men. In the cold weather the Bazoti live in the Bazoti valley; but in summer, from April to November, they go to the head of the Masturn glen in Tira, where they sow their wheat before leaving, and their rice crop in the Bazoti valley before their return to Tira. At the commencement of the British rule west of the Indus, the Bazoti were always cattle-lifting on the British border, and they organized and headed the attack on the Kohat pass which led to Sir Charles Napier's expedition of 1850. But they were quiet till the 15th January 1868, when they joined with others in again making raids. On the 11th February, a small force of 2 guns, 80 cavalry, and 480 infantry, were sent against them, but were unsuccessful, retiring with the loss of 9 killed and 27 wounded; and on the 13th February 1869, the Utman Khel attacked the Kohat Kotal, supported by the Bazoti. Colonel Keyes, 25th February, moved against them with 4 guns and 2000 men, but retired with a loss of 2 killed and 34 wounded; the enemy were about 200 strong, and lost 17 killed and wounded.

The Utman Khel number about 600 fighting men. They are the most predatory clan of all the Orakzai tribe.

Sipah inhabit from the west of the entrance to the Bazoti valley. They are Shiah Muhammadans. They share, since 1853, the allowance granted by the British for keeping open the Kohat pass.

The Abdul Aziz Khel touch on British territory. They are Shiah sectarians, and Gar in politics. The family of the Begum of Bhopal are said to be of this clan.

Another clan of Orakzai, the Mula Khel, are Hamsaya, located on the outer spurs of the Samana Garh, S.W. of Hangu; they can muster 1000 fighting men. The Mamuzai, a branch of the Lashkarzai, 3000 men. The Ali Sher section of the Lashkarzai, also 3000 men; they bring cotton.

The Bar Muhammad Khel of the Daulatzai, in the upper part of the Tira valley, can muster 1000 fighting men. They are Shiah sectarians, Gar in politics, and winter in British territory.

The Shekhan dependents (Hamsaya) of the Orakzai inhabit the hills of Drand, beyond Gaoz Dara, and to the west of Samalzai.

The Mishti Khel of Hamsaya, also a dependent section, occupy the hills from the exit of the Kohat river to Kasha. They have about 3000 fighting men.

Buner is a valley bounded N.W. by Swat, N.E. by the Puran valley, S.W. by the Yusufzai plains, and S.E. by the Indus. It consists of a hill-girt plain, about 18 miles by 12 miles, but encroached upon by spurs upon all sides from the boundary hills. It is inhabited by the Iliazai and Malizai division of the Yusufzai, who have in Buner 94 to 100 villages. They are Pathans, or Afghans, and are usually called Bunerwal. They are rich in cattle, especially buffaloes, but they have to

import grain. Buner communicates with Swat by the Karakar, Jawarai, and Katel passes, all difficult, and only used by footmen; and the passes that communicate with British territory are the Spirzai, Malandri, Surkhawi or Sherdara, and Buner. On the east the Barando defile leads into it.

Occupying parts of the Buner valley are the Alisher khels of the Gadazai Iliazai and Nurzai Iliazai, and two sections of the Iliazai Yusufzai named the Ashazai and Panjpai.

The Gadazai occupy the south slopes of the Ilam and Dosira mountains in villages. Their sections or khel are the Ibrahim, Haasn, Seni, Ali Sher.

The Bunerwal of the Buner valley, in 1849 backed up some British subjects in Lunkhor who had refused to pay revenue, and they also aided the Swati in attacking Pali, and threatening the villages in British territory to which the Paliwal had fled for safety. When the British in 1863 advanced to take possession of the Ambela pass, the Bunerwal were the most determined of the British opponents. During some negotiations, in which, unfortunately, their suspicions were aroused, they attacked the British camp on the 22d October. Further negotiations ensued, and on the 17th December they undertook to dismiss all their fighting men on the Buner pass, to destroy Malka in the presence of British officers, to expel the Hindustani fanatics from Buner, Amazai, and Chamla, and to give hostages till the above were carried out. Accordingly, on the 19th, a party advanced to destroy Malka, in which they were aided by the Amazai. Colonel MacGregor, when noticing these events, observes that 'their conduct throughout cannot but be regarded with some admiration: they fought us like men throughout the defence of the heights of Ambela, and when they made peace they stuck to their engagements like gentlemen. British loss was 847 killed and wounded; that of the Bunerwals is not known, but it must have been heavy.' In the operations in the Ambela pass, the force of the enemies opposed to the British by the 18th November had increased to 15,000 men, composed of Bunerwal, Hindustani, Swati, the Amazai, Rana-zai, Mada Khel, the Utman Khel of Lunkhor, and others.

The Chamla valley is immediately north of the Mahaban range. Its breadth varies from 1200 yards to nearly 3 miles. It is near to and politically part of the Buner country.

The Chamla valley is separated from Buner by a spur of the Guru mountain, and from the Khudu Khel by a spur of the Mahaban, but it is inhabited by Bunerwal, and the meaning of Chamla is said to be tenant-holders. The valley and the central plain of the Yusufzai are commanded by hills that descend from the Hindu Kush.

The Zaimusht are Afghans who inhabit the hills between Miranzai and Kuram. They have two great divisions,—the Khwaidad Khel and the Mahamad-zai or Mamuzai. Their villages are open, but with towers. Cultivation is only seen close to their villages, owing to the number of internal blood feuds in this tribe, which necessitate their agricultural operations being near to obtain support. Their country is a tract about 15 miles long, between two ranges of mountains, and generally covered with jungle. They remain in their villages throughout the year. They were at feud with the Bangash. There was a bitter blood feud between

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their own two clans. It arose about the year 1840 from their joining opposite sides in a dispute between the Kābul Khel Waziri and the Turi and Bangash; but in 1866, Captain Cavagnari, aided by the Miranzai people, induced them to conclude a truce for ten years. Their fighting men have been largely over-estimated at 400 cavalry and 5000 infantry.

In the Daman or skirt of the Suliman range are the Shiah Turi, the Jaji, and the Isa Khel. The Jaji dwell in houses with a *teh-khana* or excavation in the earth. The Isa Khel occupy the banks and islets of the Indus, engaged in the cultivation of wheat, but are also robbers.

The Turi Afghans inhabit the valley of Kuram. They and their neighbours the Jaji are said to be descended from two Moghul brothers, Tor and Jaji; but Lieut.-Colonel Edwards was of opinion that the Turi are Khatar Hindki in origin from the Rawal Pindi district. They have five great divisions or *khel*, termed Panjpātri or five-fathered, viz. Gandi, Alizai, Mastu, Hamza, and Dopazai, and 53 subdivisions, and can turn out 5000 fighting men. Their ordinary covering is a blanket shirt; they are dark-complexioned men, strong, hardy, and courageous, and are superior horsemen. A mounted Turi is a perfect model of a *mosstrooper*. His horse is small, but active and enduring, and he carries his own clothing under the saddle; while, at the saddle-bow, in leather wallets, hang food for man and horse, spare shoes, nails, and a hammer, in case of accident, and an iron peg and rope to picket the horse anywhere in a moment. The object of horsemanship with them is to commit daring and distant raids. A profusion of arms cover every horseman. One or two short brass-bound carbines at his back, two or three pistols and knives of sorts and sizes all round his waistbelt, and a sword by his side. Major James, however, considered them far inferior to the Waziri in courage and all manly qualities, and says, with coarse sensual features, there is much of the savage in them. On securing their prey, their eyes dilate, and they evince all the greed and ferocity of wild beasts. In their raids they are ruthless, and spare neither age nor sex. They are generally short, compact, and sickly-looking, mean, with a skulking or cunning look about them. They are at feud with the Waziri, Zaimusht, Mangal, and Jaji, and they joined General Chamberlain in the Kābul Khel expedition against the Waziri, and served as spies and plunderers. They were formerly nomads, but about the end of the 18th century settled in Kuram, which they purchased from the Bangash, and afterwards also obtained Peshawar; and the Bangash have now only the villages of Zeran and Shilofzan in the hills, and Isa Khel in the plains. The Bangash are dependents of the Turi, but there was war between them. On one occasion the Turi killed 500 Daurani on the Jaji border, and only ceased slaying on the intercession of a Kazzilbash chief. At first they gave much trouble to the British on the Kohat border, and in 1853 and 1854 made eight raids on British territory. In June 1856 they made thirteen raids; and on the 21st October 1856 a force of 11 guns, with 4500 men, under Brigadier Neville Chamberlain, marched against them, and reached Thal, the frontier village, on the 5th November, and he fined them Rs. 8680; but the feud between the

Turi and Waziri has since then given a great deal of trouble. Part of the Turi are nomads, moving with their flocks and herds between Nilab on the Indus and Kābul, wintering about Bal Yamin, and pasturing in summer near the Safed Koh. They are Shiāhs, and revere the shrine of Fahm-i-Alam, the father of Nadir Shah. Their war-cry is that of the Shiāh sectarians, *Ya Ali! Ya Haidar!*

The Waziri or Vaziri are a large tribe of Pathans, with 43,980 fighting men, who inhabit the hill country to the W. of the British frontier, W. of the Indus, adjoining the Kohat district and the district of Dehra Ismail Khan, and extending from Thal in Miranzai to the Gomal pass. Their great clans and their fighting strengths are,—the Utmanzai, 17,200; Ahmadzai, 9580; Mahsud, 14,500; Gurbaz, 1500; Lali or Lelai, 1500. They are the most united body on the N.W. Frontier of British India; they have shown a most hostile spirit and kept more aloof from the British than any other tribe. Their proper settlements are among the higher spurs of the Suliman range, where they pass the summer months. In October the greater portion of the tribe descend with flocks and herds to the lower hills bordering on the Kohat and Bann districts. The Mahsud district is rugged. The northern Waziri cultivate broad tracts on both banks of the Kuram river. They claim descent from Vazir, son of Suliman, from whose grandsons and great-grandsons, Utman, Ahmad, Mahsud, Ali, Balol, Lali, and Gurbaz, the great clans of this tribe take their names. They are tall, muscular highlanders, with considerable courage. They have warred with all their neighbours, from all of whom, except on the British side, they have made conquests. They usually go on foot, and are most active in the mountains, generally attacking at night. A Waziri when caught by any of the surrounding tribes was never spared. On the other hand, the Waziri never injure women, nor take their jewels, but all men they invariably kill. Their neighbours admit their truthfulness and courage. They are haughty and bloodthirsty towards strangers. They are a fine race, prone to plunder, and careless about bloodshedding; but bold, plain spoken, true to their friends, and inclined to be boastful and rough in council. They have never owned any allegiance to Kābul.

The Mahsud Waziri number about 15,000 fighting men; they inhabit the hills on the Tank and the South Bann borders. Their sections are the Alizai, 5600; the Shahman Khel, 3000; and Balozai, 8100. They have always been highly predatory, especially the Alizai branch, and are at enmity with all around them. On the British occupation, they resumed their habits, and in 1860 the tribe was overcome by a force under General Chamberlain, 5196 strong. The British lost 63 killed and 166 wounded; the Mahsud Waziri lost more, but nevertheless have continued troublesome. They occupy the vast and lofty mountain range to the S. of the Bann district, and to the W. of the Dehra Ismail Khan district. Its principal hills are the Ghubur, about 7000 feet above the level of the sea; the Pirghul, 11,500; the Shuvi Dhur, 11,000 feet; and behind and above all, beyond the Mahsud territory, towers the Takht-i-Suliman, 14,000 feet above the sea level.

The Ahmadzai have about 9580 fighting men.

INDIA, THE NORTH-WEST FRONTIER TRIBES.

The Hati Khel are the most numerous of all the Ahmadzai. They are very much employed in the salt trade, but had many idle hands, some of whom in a band of robbers murdered Captain Mechem on the 5th November 1859. Before the Sikh conquest of the Panjab, about the beginning of the 19th century, the Ahmadzai nomades had occupied the Banu country in winter, and at length took permanent possession of the lands nearest the Thal. The Bizan Khel section of the Ahmadzai are responsible for the passes of Pinza, Khurd, Kalani, Kilhoi, Ghlosin, Tangi.

The Utmanzai are the most northerly clan, and can muster about 17,000 fighting men. Of their sections, the Kabul Khel are wild and lawless, with three subdivisions, the Miami, the Saefali, and the Pipadi, numbering 3500 fighting men. The Kabul Khel, between 1850 and 1854, committed over twenty petty raids on British territory, and the British blockaded the whole tribe.

Although the Waziri are a united tribe, the clans have not joined each other on the occasions of the British expeditions into their territories. The blood feuds are not extensive, the actual murderer only being permitted to be slain in avenging a murder. They have no poor amongst them, the tribe subscribing to re-establish any family who are in need. They have cereals as their chief food, but use mutton. All graveyards are sacred to the Waziri, who in their yearly migrations to the hills never hesitate to deposit on the family tombs any property they wish to leave behind them. This is left untouched even by professional robbers. They have amongst them great numbers of fakirs, and they hold the tomb of Darvesh Musa in great veneration. In cases of adultery, they kill the woman and cut off the man's nose. Like all Pathan tribes, marriages are entered into after puberty. Childless widows are re-married to a relative of the deceased. The bridegroom buys his bride.

The *Batani* Pathans inhabit the outer spurs of the Waziri Hills, adjoining the S. of Banu and N. of Dehra Ismail Khan districts, from the E. slopes of the Gabr mountain at the Shamla Khurd pass to the Hisara pass. They trace their lineage through Batan to Kais, the founder of the Afghan race. Captain Maclean's list of their sections gives the Dana with 1400; the Tata, 1600; and the Uraspun, 1000 fighting men. Captain Norman gives the sections of the Dana as the Bobak, Bobar, Voraka; and the Uraspun, as the Tsaplai Shakhai. Captain Carr gives ten sub-sections of the Tata, 16 of the Dana, and 13 of the Uraspun. The Batani country is bare, stony, and uncultivated, resembling the Doon of the Himalaya. There are numerous passes into their hills; their principal settlements within the hills are those of Jandula, Siragar, and Gabr. They have flocks of sheep and herds of cattle, and cultivate wheat and bajra (*Penicillaria spicata*). They are of middle height, spare and wiry, are agricultural but predatory. They number 4600 fighting men at the outside. They were for years troublesome. They bring to British territory, grass, wood, wool, ropes, malu, camels, bullocks, sheep, goats, hill rice, ghi, and honey, and take back grain, sugar, oil, salt, donkeys, piece goods, and sandals.

Dawar is a rich, open, and fertile valley, in lat. 33° 7' N., and long. 82° 57' E. It is called Rodh by the

inhabitants, who style themselves Dum or Marasi; it is entirely surrounded by the Waziri Hills, and the Waziri settlers on the British border. The Banuchi are its nearest neighbours, and its communications with its neighbours are through the mountain tracts of the Suliman range. The tribal divisions are Tapizai and Malai, with many subdivisions; and the entire population has 25,000 souls, all of them Sunni Muhammadans. All their villages are walled; fever prevails, and goitre is a common disease. Lieutenant-Colonel Edwardes described them as great blackguards, and they are depraved and vicious, and are addicted to great crimes. They shave one eyebrow, half the moustache, and half the beard, and apply antimony above and below the eye. On the 6th March 1872, a force of 1650 cavalry and infantry with two guns was sent against them under Brigadier-General Keyes, C.B., and after a brief action on the 7th they submitted, the British loss being 6 wounded, and the Dawari loss 43 killed and 30 prisoners.

Chamkani, a tribe who inhabit the base of the Safed Koh, said to have 3500 fighting men. They are very poor.

Shirani or *Sheorani* are a Pathan tribe who inhabit the hill country to the W. of the British frontier, from the Shekh Hyder pass on the N. to the Ramak on the S. They thus adjoin the subdivisions of British Tank, Kolachi, Draband, and Chaodwan. Their fighting men have been variously estimated at from 3000 to 10,000. They have three great sections,—the Chua Khel, Uba Khel, and Sen Khel,—with numerous clans. A great part of their territory is occupied by the Takht-i-Suliman and the hills which surround its base. Many parts of it are nearly inaccessible; one road in some places is cut out of the steep face of the hill, and in others supported by beams inserted in the rock, and is still impracticable for loaded bullocks. The population is scattered in villages of from 20 to 40 houses through the valleys and lower part of the mountains. The sites of their houses are cut out of the slopes of the hills, so that on three sides the earth forms the lower part of the wall. Each cottage has only one room and one entrance, which is closed at night by the branch of a thorny tree. The Shirani are of middle stature, spare, but stout; have bold features, grey eyes, high cheekbones, and their general appearance is wild and manly. They are hardy and active. The clothing of a common Shirani consists of a coarse black blanket tied round their middle and another thrown over their shoulders; a few yards of white cotton cloth is loosely twisted round their heads; and their feet are protected by sandals made of leather prepared by the tamarisk. Their usual food is bread made of Indian corn, with butter and kurut, and wheaten bread; their luxuries are milk, wild olives, pomegranates, and pine seed. Mutton is occasionally eaten. They never kill horned cattle for food, but when a bullock happens to die, they cut its throat in the Muhammadan manner, and eat it. They marry late, and the women have only domestic work, except at their two harvests. The principal employment is agriculture, the valleys being largely irrigated. The common stock consists of small bullocks, but they have asses, a few goats, and a very few horses. They are punctual in their prayers. They were at war with all the surrounding tribes that pass

through their country in the annual migrations. The passes into their country are the Chaodwan, Draband, Gajestan, Guioha, Isparikat, Kuram, Ramak, Shekh Haidar, Shirani. Prior to the British annexation of the Dehrajat, the Shirani were the terror of the whole border, and were generally the aggressors. From 1849 to 1853 they annually made inroads on the British territory, but in the last-named year they were met and defeated and followed up by Brigadier Hodgson, and their fort of Kotki mined and blown up. Mr. Elphinstone gives a very favourable account of them, but Colonel MacGregor commenting on it observes that 'a Pathan obeys no one, and, except the dictates of his own revengeful and avaricious nature, nothing has any influence with him.'

The *Babar* tribe inhabit the Koh-i-Daman of the Dehra Ismail Khan district, opposite the Saugor and Dahina passes. Between them and the Mian Khel, on a boundary dispute, a blood feud raged for upwards of a hundred years, each year renewed. They are a brave but scattered tribe. They are of Shirani descent. They number 600 or 700 fighting men. They are of mercantile habits, and are the richest of all the tribes of the Daman. They are very fair, and are the most superior race in the Trans-Indus districts. The proverb, 'A Babar fool is a Gandeypur sage,' testifies to their wisdom.

The *Ushtarana* or *Oshterana* is an Afghan tribe who inhabit the outer hills opposite the extreme south portion of the Dehra Ismail Khan district. They are conterminous of the Dehra Ismail Khan and Dehra Ghazi Khan districts. They are largely engaged in trade, and have been supposed to be a division of the Lohani tribe. They are in two clans, the Gagalzai and the Ahmadzai, each of which has about 450 fighting men, but there had long been a blood feud between them, and they were hardly on speaking terms. Nothing can be more miserable than the whole of the *Ushtarana* country. They are not predatory, and are the bravest tribe of the Suliman range. They possess a large tract of land in British territory. On the outbreak of the Sikh war in 1848, 200 of them followed Major Edwardes to Multan. The Vooch or Korah pass, on the border of the *Ushtarana* hills, and nearly opposite to Dehra Fattah Khan, constitutes the boundary line between the Pathan and Baluch tribes. It is faced by the British outposts of Doulalwalla and Vihowa.

The *Kasrani* are a Baluch tribe who dwell in the extreme north of the Dehra Ghazi Khan district, a portion of the south of the Dehra Ismail district, and in the hills to the immediate west of these tracts. Their hills extend from the Korah pass downwards for a distance of about fifty miles. They have many subdivisions, and their fighting men are estimated at about 668. There are about 8314 of this tribe in the plains of the Dehrajat, and they graze large herds of cattle on the sandy plains between Kot Kasrani and Vihowa. They are the most northerly of all the Baluch. They made an inroad on British territory in 1852, and were punished by the police; and in 1853 Brigadier Hodgson moved against them with 1000 sepoy and police, and destroyed some villages. The hill *Kasrani* and their neighbours the *Bozdar* long had a bitter feud, but by British influence a truce was arranged. In 1868 Lieut. Gray attempted to seize Jahangir Khan, but he was himself made a

prisoner and carried off, and only released after a force of the *Bozdar* and the Panjab cavalry had been sent in pursuit.

Khastai, a small tribe of Pathans beyond the Dehra Ghazi Khan border. They are peaceful and quiet, agricultural and pastoral.

Luni, a Pathan tribe west of the Dehra Ghazi frontier. Their neighbours on the north are the Kakar and the Musa Khel, on the south are Murree Tarin, with the Khetran on the east. Their adult men are 1200. They speak a mixture of Pushtu and Baluch. The Chumalang range of hills produces a valuable coal, also sulphur.

Bozdar, a Baluch tribe who occupy the hills on the Dehra Ghazi Khan frontier. Their country extends on the north as far as the Saugor pass and Drug, where they touch the Kasrani, Esot, and Jafar; on the east to the foot of the hills on the Saugor border; on the south to the Vidor pass and the Majvel Sham (plain), where they meet the Hadiani and Khetran; and on the west to the crest of the Kala Roh, where they are bounded by the Luni and Musa Khel Pathans. Their country is about 40 miles long by 30 broad, and is entirely mountainous, formed of the outer spurs of the great Suliman range. They number about 2720 fighting men, as under:—

Dulani, . . . 850	Chakrani, . . . 400	Jalali, . . . 120
Ladwani, . . . 360	Sihani, . . . 150	Jafarani, . . . 300
Gholamani, . . . 300	Shahwani, . . . 140	Rustamani, . . . 100

and they have numerous subdivisions,—according to Major Minchin, 64, with 3776 fighting men. Their country is a series of bare and sterile ridges, divided by bare ravines with small patches of cultivation. They are friendly with the British. Their greatest enemies were the *Ushtarana* Pathans, and at times the Khetran. They fight with matchlocks. They have few horses, and about 100 horsemen. They purchase the coarser grains, cloth, tobacco, and oil in the markets of British India. They claim to be of Rind Baluch origin; and their name, from Boz, a sheep, was given because of their possession of large flocks of sheep. From 1850 to 1856 they were frequently troublesome to the British, and in 1857, an expedition, 2369 strong, under General Chamberlain, was moved against them. The *Bozdar* numbered 1700, and lost 20 to 30 killed and 50 to 70 wounded. More than all the frontier tribes, the *Bozdar* had for years previously plundered and murdered in the plains and the hills. They recommenced plundering in 1861, but later on they behaved better.

Esot, a small tribe of Afghans near the Dehrajat frontier. Balfarat, a small clan of *Esot* Pathans on the Vihowa border of Dehra Ghazi Khan.

The *Jafar* is a tribe of Pathans with 500 fighting men. They dwell to the N.W. of the *Bozdar* hills, between the Buj spur of the Suliman and the *Bozdar* tribe. They have twelve branches, and possess a few camels and horses.

The *Khetran* or *Khetran* are a Baluch tribe inhabiting the hills to the west of the Dehra Ghazi Khan district. The Khetran are curiously intermixed with the Baluch tribes, and farther south are the Kosa, Laghari, Gurchani, Murree, and Bugti, occupying the frontier line of the Dehra Ghazi Khan district down to its point of junction with the Sind border; on the north the Musa Khel and Luni Pathan, the *Bozdar* on the N.E., the Hadiani Laghari on the east, and the Durkani section of

the Gurchani occupy the high crests of the Kala Roh and the Morunj plain. The Murree are on the W. and S.W. West of the Kolu valley is the small tribe of Zarkhan Pathans, west of whom again are the large tribe of the Tarin, and N.W. are the Ushtarana and Shahdozai. It is a large extent of country. Their boundaries can with difficulty be marked out, and they lay claims to portions of the adjoining lands. Their sections are the Ganjura, Chacha or Dariwal, Hasani, and Nahr, with many clan subdivisions, and their fighting men have been stated at from 3000 to 6000. They all live inside forts. They are the wealthiest of the Baluch tribes, are not warlike, do not plunder, and are largely engaged in cultivation, but are recipients of all the plunder on the border. They seem to have been formed by branches of other broken tribes. They are at feud with the Murree, Bozdar, and Durkani, and with the Luni and Musa Khel Pathans. They carry on a large trade with the British territory. A branch of the Khetran live round Vihowa in the Dehra Ghazi Khan district, who can raise 300 fighting men.

Hasani, a tribe in the Khetran country near Laghari Barkhan, also in the Shahdozai country.

Zar Khan, a small but very martial tribe of Pathans inhabiting the Kolu valley, and separated from the Khetran by the Jandran range. They number 600 men. They have good horses, and their arms are swords, shields, and matchlocks.

The *Laghari* tribe on the border of the Dehra Ghazi Khan district occupy from the Dalana on the north to the Kura pass on the south. Their sections are the Aliani, Hadiani, Boglani, and Haibatani, with numerous clans. They have been variously estimated as capable of furnishing from 1900 to 5250 fighting men. In the Dehra Ghazi Khan district, in 1868, there were also 11,311 Laghari and 904 in the Dehra Ismail district. At the opening of the Sikh rebellion they sided with Mulraj.

The *Kosa*, in the Dehra Ghazi Khan district, is a Baluch tribe with seven divisions,—Balelani, Jangel, Jandani, Jarwar, Isani, Tomiwala, and Mehrwani, estimated capable of furnishing from five to six thousand fighting men. They are among the bravest of the Baluch, and formerly were very powerful. They live almost wholly in the plains, which they cultivate. They are likewise graziers, and have numerous flocks. There have been difficulties in securing the succession, but the tribe has twice aided the British.

Gorchani, Gurchani, or Gorishani tribe are Baluch, but mixed, who inhabit the Jampur division of the Dehra Ghazi Khan district in the immediate vicinity of Harand. They have thirteen sections,—Shikani, Hotwani, Khalilani, Alikhani, Bazgir, Jaskani, Pitafi, Lishari, Durkani, Chang, Surani, Joqiani, and the Helwani. Their fighting men are estimated at 1100 to 1200. The Pitafi and Lishari sections had been inveterate thieves, and until 1866 continued to give trouble; but in recent years there has been no complaint against them. Their population is 3938 souls, of whom 1100 or 1200 are adults. In 1867, a raid on Harand by 1200 Murree, Bugti, and Khetran, was met by the Gurchani and the 5th Panjab Cavalry, and defeated with great loss.

Murree or *Mari*, a brave Baluch tribe who inhabit the outer hill which surrounds Cutchi on

the east, north, and north-west sides. They are subject to the Khan of Kalat, and nowhere touch on British territory. They possess the districts of Kahan, Mundahi, Jantali, Phailawar, and Nisao, and their four main sections are the Ghazani, Loharani, Bijarani, and Mazarani. Their country extends from the Bolan pass to the Phailawar plain, about 120 miles, mostly barren hills, but with many fertile valleys. They are nomades, and rich in cattle, but their habits were altogether predatory, and they can furnish about 4000 fighting men. The portion who inhabited the eastern hills in Cutch Gandava were notorious for their lawless habits, and for making frequent inroads on the plains. They and the Maghazzi seem to have emigrated from Cutch Gandava at different periods, and to have become incorporated with the Jat cultivators. A peaceful and obedient portion of the tribe are in the hills west of the province below Jell. A large portion are at Adam Murree on the S.E. frontier of Sind; the Doda Murree occupy Kahan. In April 1840, Captain Lewis Browne of the 5th Bombay Native Infantry occupied Kahan, and held it till the 28th September, when he retired with his arms and a gun,—all efforts to relieve him having failed. In one of these disastrous efforts under Major Clibborn at Nufusk, the British lost 179 killed and 92 wounded; they subsequently met with many calamities. On the 23d May 1849, in a fight with the Brahui at Bili Nani, they lost 750 men out of 1300. In August 1849, they plundered the village of Mal, and attempted predatory incursions on British territory. In 1852 (24th January), the fort of Kahun and many of its houses were destroyed by an earthquake, and many lives and much property lost. A cave in a hill, in which many were dwelling, was filled up by the fall of the hill, destroying 260 Muhammadans, 80 Hindus, and many cattle. On the 11th December 1852, a large body of Murree attacked the town of Pulaji, and killed 40 of the Kaihiri. Major Jacob then remonstrated with the Khan of Kalat, and urged him to restrain his subjects; but on the 30th January 1853, a party of 200 Murree horsemen left their hills, and attacked some Bugti shepherds on the Mazardan plain. On the 23d March of that year they fell on the village of Trihar, killing several of the Dumki, and carrying off a very great number of camels and other cattle. On the 3d April they had carried off cattle from Kasnir, and were followed by the Sind Horse, and, coming up with them near Hirpani, a hand-to-hand fight ensued, in which the British lost ten killed and wounded. They made raids on the 17th and 23d June, the 10th and 17th September, 28th October, 26th November, and 28th December 1853, and 24th February 1854. On the 21st January 1859, the Khan of Kalat assembled 8000 horse and foot to punish them, and was accompanied by a British force under Major Malcolm Green, and Sir Henry Green was present, and the Murree tendered their submission. But in December 1862 the Khan was obliged to take another force into the hills. In their attacks on the Panjab border, between the 25th September 1850 and 1869, they made about twenty raids, killing people and carrying off cattle. On the 1st February 1869, the Murree chiefs met Colonel Playre, in the presence of the Bugti, Dumki, and Mazari chiefs, and the Murree agreed to live peaceably.

INDIA PROPER. BRITISH TRIBES ON N.W. FRONTIER.

The *Bugti* tribe are Baluch who inhabit the hilly country to the west of the Rajanpur border, and it has been estimated that they can muster from 1200 to 4000 fighting men. Their six divisions are the Kaheja, Nothani, Musuri, Kalpar, Phong, and Kiazai. Much of their country is rugged and barren, but it contains good pasture lands and some fertile valleys. They claim to be allied with the Rind Baluch. They and the Murree were unceasingly at war, but the Bugti were also at feud with the Mazari, Dreshuk, Dumki, Burdi, and others. They made predatory attacks on the British army when advancing towards Afghanistan. In 1844-45 Sir Charles Napier advanced against them with 2500 men, and was opposed by about 3500 Jakrani, Dumki, Bugti, and Khetran. The campaign lasted from the 15th January to the 4th March 1845, on which the chiefs submitted, after 54 days of incessant exertion. They again, on the 10th December 1846, assembled a force of 1500 armed men, and made an inroad to within 15 miles of Shikarpur, and returned to their hill with 15,000 head of cattle, without the loss of a man. On the 1st October 1847, the whole Bugti force entered the plain, but were met by Lieutenant Mercwether of the Sind Horse, with 133 men. The Bugti formed a solid mass to receive the attack, but were overthrown at the first onset, retired, and were again defeated, and at last threw down their arms and surrendered. Out of 700, only two horsemen regained the hills, while the loss of the British was nine killed and wounded; and the tribe, broken and dispersed, fled for refuge to the Khetrans. Nevertheless petty inroads occurred, and on the 7th April 1869, 500 Bugti attacked the post of Kashmir, and were repulsed, and, as they retreated, a native officer and party came on a party of 300 or 400 Bugti driving off 1000 camels. He immediately charged them, killing many, and recovering all the camels.

The **BRITISH TRIBES** on the N.W. frontier of India inhabit partly hills and partly dwell in the plains. They may be enumerated as follows:—

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|---|----------------------------|
| i. Hazara district— | |
| a. Turnouli of Darwazai. | d. Swati. |
| b. Syuds of Kaghan and Agor. | c. Dund or Doond or Dhund. |
| c. Ghakar. | f. Sutti. |
| ii. Peshawur district— | |
| a. Yusufzai. | c. Mohmund of the plains. |
| b. Khalil. | |
| iii. Kohat and Peshawur district— <i>a.</i> Khatak. | |
| iv. Kohat district— <i>a.</i> Bangash. | |
| v. Dehra Ismail Khan district— | |
| a. Banuchi. | c. Chiefs of Kolachi. |
| b. Marwati. | f. „, Dehra Ismail Khan. |
| c. Butani. | g. Nutkani. |
| d. Chiefs of Tank. | h. Lund. |
| vi. Dehra Ghazi Khan district— | |
| a. Dreshuk. | b. Mazari. |

The British Hazara is a Cis-Indus district of the Panjab. It is a mountainous country, bounded on the north by various independent tribes, on the S. by Rawal Pindi, on the E. by Kashmir, and on the W. by the Indus. Its greatest length is 130 miles, and breadth 40 miles, with an area of 2994 square miles. It has four revenue subdivisions,—Haripur, Mansera, Tanawal, and Kaghan. In the last are Gujar ryots, and Swati occupy Kunhar as far as the Black Mountain. In its

south portion are the Bomba, Dhund, Karal, and Ghakar, and in the tracts on the Indus are the Utmanzai, Mashwani, and Tarkheli.

The Tanaoli and Jadun are in Tanawal. They are fair cultivators. The Gujar, Awan, and other Muhammadan converts are hard-working and thrifty; the Syud, Swati, Utmanzai, and Tarkheli are careless, lazy races. The Mashwani are very thrifty.

Agror is a subdivision of the Hazara district, 10 miles long and 6 broad, consisting of three main valleys in the upper portion of the Unar river, bounded on the north by the Mana Ka Dana spur of the Black Mountain. Its beautiful mountain glens, Unar, Arbora, and Kathai, are one mass of luxuriant vegetation, and open into several minor glens,—Chulandarian, Kabl, Bazdara, and Kanjara Dara. A great spur comes down from Nanga Parbat, and another range comes from above Kabl. The inhabitants, 8721 in number, are Swati and Gujar of low physique and debased morality. The Swati have all the vices of the Pathan without his courage, and they do not care to fight even for their own fields. There are a few Tanaoli, Awan, Pathan, Koreschi, Syud, and Dasht, bigoted Muhammadans, who speak Pushtu, all ruled by a khan. The Korsh tribe claim Arab origin, and are in all the Trans-Indus districts.

There are also in Agror portions of upwards of twenty Afghan tribes, with the usual artisans of eastern villages, and a few Khatri and Brahman Hindus, living in 45 small villages. In July and August 1868 a small force was sent into Agror; the Swati submitted, but others held out, and a large force under Major-General Wilde advanced to the Black Mountain. In July 1869 two hamlets in the valley were burned by raiders of the Hasanai, Parari Syud, and Akozai, on which a British force destroyed the Akozai village of Shahtut. On the 5th and 15th April 1870 and 4th June 1871 other villages were attacked by raiders, but after 1872 the Agror valley and Hazara border were free from any hostile attacks.

Swati.—The Alahi valley, to the north of Hazara, drains into the Indus nearly opposite Ghorband. The inhabitants are Swati.

The *Kohistan* is a valley on the Hazara border to the N.E. of Alahi, along the west and north of Kaghan. It has an area of 500 or 600 square miles. The Kohistani claim to be of Arab descent, but their neighbours say they were idol-worshippers up to the last quarter of the 18th century. This seems correct, as their divisions are the Rana proprietors, the Yeshkan vassals, Kamin artisans, and Dum musicians. The Kohistani are a physically fine race, free spoken and very united. They trade in timber and other produce. Their divisions or khel are the Bara, Kali, Galoch, Shandar, and Gatar.

The *Kaghan* valley or glen forms the most northern part of the Hazara district. It has a population of about 22,000, Syuds and Gujar. It consists of the inner slopes of two parallel mountain ranges, clad with perpetual snow, and ranging in height from 12,000 feet at the S. entrance of the valley to 15,000 feet at its northern head. It stretches upwards till it nearly reaches Chilas. The Gujar are quiet and peaceable cultivators. The Syuds are proprietors, having received it

from the Sikhs. They are lazy, disunited, and intriguing. They were proceeded against in 1852, and they surrendered to the British.

Gujar are found in the frontier districts of the Peshawur division, and amongst the independent tribes. They profess Muhammadanism, are cultivators and rear cattle. They are a fine healthy race, quiet, industrious, and frugal. They are of Jat descent, but are now subdivided into clans and khel like the Afghans. They are very numerous, and form the entire population of many villages. They are not owners of the lands beyond British limits, but lease from the Pathan proprietors.

The Bambar tribe of Hazara inhabit the range of mountains behind Raragoli, N.E. of the Jadun. They are a portion of the Bambar tribe of Muzaffarabad. They have no sympathies with any other Hazara tribes.

Mashwani are a tribe of Syuds in the Hazara district in the N. portion of the Gangdar range, also about 400 families in the Koh-Daman of Kabul. They are of fine physique, manly, brave, and truthful. They are large carriers.

The Utmanzai inhabiting the Torbela and Khalsa tracts of Hazara are a branch of the Utmnzai of Yusufzai. The population of Khalsa is 8567 souls, and of Torbela 7088.

The Jadun or Gadun is a Pathan tribe partly on the slopes of the Mahaban mountain, partly in the Hazara district, and in part Trans-Indus. They are surrounded by tribes of Yusufzai origin. Their country is called Gaduna. They have two divisions, —Salar and Mansur. They claim to have 12,000 fighting men, but may have a sixth part of that number, and these are badly armed. The British have several times blockaded them in their valleys.

Dalzak is a tribe of Afghan descent, part of them inhabiting a portion of the country on the right bank of the Indus, but are chiefly on the left bank in Hazara.

The Dhund is a very handsome race, inhabiting the Boi tract of Hazara, especially between the Jhelum and the main range, numbering 18,518 souls, living in villages on plateaux about 1000 feet above the river. They are improvident, lack energy, and have been badly affected towards the British.

The Tanawal district on the Hazara border is the most wild, mountainous, and rugged part of Hazara, and is peopled with armed and warlike peasants. It is divided by the river Siran into an eastern and a western part. The Palal are British subjects, and the Hindwal are in an independent principality, and occupy an actual area of about 720 square miles in the Doaba of the Indus and Siran, with a revenue of Rs. 28,000. Bahingra, a rugged, steep mountain, is in independent Tanawal. The Pakli plain in the Hazara district is occupied by the Swati, Awan, Syuds, and Tannoli.

The Karil are a poor, humble tribe, 16,615 in number, dwelling in the Nara tract of the Hazara district and in the Jadun tract. Some of their villages on the spur of a ridge in Hazara are 5000 feet above the sea. They are agriculturists. They are of Hindu origin, converts to Muhammadanism.

The Awan are the most numerous and the best of these frontier tribes, and there is no better people in India. They are settled in large agricultural communities on the Chach plain, on the eastern side of the Indus, and in smaller bodies

farther east, on the Jhelum, Gujerat, and Sealkot districts. They are scattered in Yusufzai and the Kohat district, as well as in Hazara and other districts on the left bank of the Indus. In Yusufzai they are said to number 3000 souls. They have enlisted in the Panjab force and in the regular infantry. They are good soldiers. The Awan of the lower lands, and Dhund, etc., of the higher lands, have democratic village institutions.

Gakkar, Ghakar, or Kakar, a tribe inhabiting portions of the Hazara, Jhelum, and Rawal Pindi districts of the Panjab. They claim to have come into their present position from Seistan with Mahmud of Ghazni; but they are one of the oldest and most powerful of the Hindu dynasties of the Panjab. They opposed Mahmud on the plains of Peshawur, but they seem soon afterwards to have adopted Muhammadanism, and their country was a jaghir to them from the times of the first emperor of Delhi, for which they paid the annual tribute of a horse, and rendered military service at first to Delhi, afterwards to Kabul, and subsequently to the Sikhs. About 1783 they suffered from a severe famine.

In 1847, when the British came into contact with the Hazara, they took the British side; they aided in the siege of Multan, and again sided with the British in the mutiny of 1857. Their chiefs have borne the titles of Sultan, Mirza, and Raja. The Gakkar are not distinguishable from the Awan in personal appearance, both being very large, fine men, but not very fair.

They are supposed to be descendants of the mountaineers, whose chief Ambisaces sent ambassadors with presents to Alexander. In the time of Mahmud they inhabited the Salt Range or Jhow mountains between the Indus and the Behut (Hydaspes). Baber names them Gakar; but it is also written Ghaka and Kakha. At an early period of history, old writers tell us that they were given to infanticide and polyandry. It was a custom, says Ferishta, 'as soon as a female child was born, to carry her to the market place, and there proclaim aloud, holding the child in one hand and a knife in the other, that any one wanting a wife might have her; otherwise she was immolated.' By this means they had more men than women, which occasioned the custom of several husbands to one wife. When any one husband visited her, she set up a mark at the door, which, being observed by the others, they withdrew till the signal was removed.

The Dhund, Tanaoli, Alpal, Kurral, Awan, and Gakkar tribes are known only by their tribal names, without any common appellation; they live north of the Salt Range. They are described by Mr. Campbell as the finest and handsomest men in India, perhaps in the world. They profess Muhammadanism, and have fanciful Muhammadan genealogies, but are wholly Indian in their language, manners, habits, and constitutions. Their language is Panjabi. They have no connection with the Pathan races, and they claim none with the Jat and Rajput, the Dilzak alone claiming to be of Hindi origin. Their features would seem to show that they have kindred with the Kashmiri, or with the pre-Hindu congeners of the earlier Indians found in the hills far west, but their language and character, dress, and the architecture of their houses, would indicate that they are nearly allied to the Panjabi.

INDIA PROPER, ITS PESHAWUR PROVINCE.

Peshawur, in the Panjab, is the name of a province, a district, a city, and military cantonment. It is British territory, in India proper. The city is in lat. 34° 1' N., and long. 71° 37' E., and 1200 feet above the sea. The district lies between lat. 33° 50' to 34° 30' N., and long. 71° 30' to 72° 50' E. The cantonment in 1868 had 21,720 inhabitants; the city, 60,974; while that of the district was 523,152, principally various tribes of Afghans, with Paracha, Khojah, Tajak, Kashmiri, and Brahmans, giving 271·2 souls to the square mile, the chief races as under:—

Europeans,	3,375	Orakzai,	153
Eurasians,	15	Waziri,	105
Americans,	17	Lohani,	157
Syuda,	10,498	Laghari Baluch,	107
Moghul,	21,426	Bhoti,	572
Yusufzai,	82,170	Jat,	629
Khatak,	4,735	Gujar,	10,384
Mohmand,	28,043	Paracha,	4,135
Khalil,	17,699	Kashmiri,	12,236
Dundzai,	15,311	Khojah,	596
Muhammadzai,	22,089	Brahman,	2,186
Kamalzai,	107	Khatri,	6,398
Saduzai,	276	Bania,	3,444
Popalzai,	259	Arora,	11,957
Awan,	9,584	Sud,	604
Hindki,	15,824	Parsee,	30
Shikarpuria, etc.,	7,000		

The tribes on the Peshawur and Kohat borders are in two political factions,—the Gar and the Samal. The tribes who are of the Gar faction are the Abdul-Aziz, Adam, Afridi, Akhel, Aikhel, Bazoti, Firoz, Kambar, Kuki, Manu, Masuzai, Sipah, Turi, Ustura, Utman. The Samal faction are the Afridi, Aka, Ali-Sherzai, Bar-Muhammad, Kamr, Khadarzai, Malik Din, Mishti, Mamazai, Orakzai, Rabia, Shekhan, Sipah, Soda, Waziri, Zaimusht, and Zakha. The factions arose two hundred years ago, in the quarrels of two Hindu brothers.

Peshawur is said to be a corruption from *Purshawur*. Major James thinks it means the seat of *Purru* or *Poru*, the name of a king or dynasty, as similarly *Lahawar* means the seat of *Lawa*.

The Peshawur valley is at the extreme north of the Trans-Indus territory. On its north are the hills of the Mohmands, Utman Khel, Swat, Buner, and the Mahaban tribes. It is bounded on the E. by the Indus, S. by the Khatak and Afridi hills, and W. by the Khaibar mountains. Its area is 1928 square miles; the valley is closed on the N.W. and S. by a more or less continuous range of high hills. To the east for about 20 miles is a gap occupied by the plain of Chach. The northern boundary is a continuous range of hills extending in an arc from the Indus, opposite Torbela to the Swat river, where it debouches on the plains at Abazai Fort. The highest points in this range are Mahaban, 7471 feet, Tatara, 6862 feet, Mulagarh, 7060 feet. Its N.E. is inhabited by Yusufzai; the Khatak, Khalil, Mohmand, and Daudzai occupy districts with these names; the Muhammadzai and Miana inhabit Hashtnuggur, and Lunkhor has the Khatak and Utman Khel; while many tribes are in Doaba and Khalsa. It is highly fertile and well peopled. Its rivers are the Indus, the Swat river, the Kabul river, which divides into streams. The Yusufzai have the best climate and are the finest people. In this district Lieutenant-Colonel Mackeson was wounded on the 10th September 1853. Major Adams, wounded on the 15th January 1865, died on the 26th of

that month, and on the 3d October 1865 Lieutenant Ommaney was killed.

The *Yusufzai* Pathans inhabit the hills north of the Peshawur district, and the Yusufzai division of that district lies between lat. 34° to 34° 3' N., and long. 71° 55' to 72° 40' E.; area, about 2000 sq. m.; population, 98,977. They claim that their ancestor Mandai had two sons, Umar and Yusuf. Umar left one son named Mandan, from whom and Yusuf the tribe are descended. Mandan had seven sons, from whom sprang the Usmanzai, the Utmanzai, and the Rajar.

Yusuf had five sons, viz. Uria surnamed Badi, the founder of the Badi Khel, Isa of the Isazai, Musa of the Musazai, whose son Ilias founded the Iliazai, Mali of the Malizai, and Ako of the Akozai. There is also a Yusufzai clan called Ramzai.

The total population of the Mandan branch is 140,000 souls with 30,000 fighting men, and of the Yusufzai, 106,000 souls with 43,200 fighting men. About the year 1873 there were 793 Yusufzai serving in the Bengal army and 364 in the Panjab force. Besides the Yusufzai, their district had in its population, Gujar Awan 3000, Kashmiri 6000, Hindki 10,000, Mula slaves and Hindus. The Gujar are Muhammadans; they form the entire population of many villages; they cultivate the lands, paying rent, and are also cattle graziers. They number about 75,000 souls, and are a fine athletic race.

The Hindki are mechanics, artisans, and traders, and have the following guilds amongst others,—Charikar, ploughmen; Dum or Mirasi, musicians; Gadba or Kawanri, shepherds, graziers; Musalli, sweepers; and Shahkail, cotton cleaners. All the Hindki are termed *Hamsaya* (neighbour) or *Fakir* (beggar). The Ghulam slaves were descendants of war prisoners; the men are called *Mrai* and the women *Windza*. They are beyond the British frontier.

The Mula number 34,000. They have two sections, *Astanadar* or *Buzurg* and the *Mula*, both of them holy classes. The Hindus are nearly all Khatri, and number 22,000.

The Yusufzai, formerly nomades, are now agriculturists and traders. They are superstitious, proud, greedy, and revengeful; they observe their religious rites of prayer and pilgrimage, almsgiving (*Zakat*, *Khairat*, and *Ashar*) and fasting. They are boastful of their descent and prowess, and demand, Am I not a Pukhtun? They are hospitable; but so soon as the guest leaves he might be robbed or murdered by his late host. Their honour, *Nang-i-Pukhtana*, is satisfied with Badal or retaliation; Nanawati, sheltering a guest; and Mailmastai, feeding a stranger.

They are suspicious and jealous of their women; the abuse or slander of one's female relatives was only to be washed out by blood; and not unfrequently the slandered one, whether guilty or innocent, was murdered to begin with. They do not treat their women with respect or confidence. Elopements (*Matiza*) are one of the most fruitful causes of feuds. They are dirty in their persons and clothes. They are fond of field sports, and in disposition are lively, merry, fond of music and recitations. The women are uneducated, and coarse and obscene in their conversation. On a death occurring, the women of the quarter assemble for the vir or wuzar lamentation.

The Mandan division of the Yusufzai number 4000 souls, with 80,000 to 100,000 of other races settled amongst them. They can muster 25,000 to 30,000 armed men. They have seven khel or clans.

The Utmanzai is a division of the Mandan.

The Razar section of the Mandan comprises five of the seven sections of that division. They all reside in the British district of Yusufzai, and give their names, Ako Khel, Malikzai, Manizai, Khidizai, and Mamuzai, to their respective subdivisions. The Mamuzai rebelled during the mutiny of 1857, but were subdued.

The Akozai is a division of the Utmanzai clan of the Mandan Yusufzai. They are located beyond the British frontier, and occupy the south spurs of Mahaban, on the right bank of the Indus.

The Khudu Khel section of the Saddozai division of the Utmanzai Mandan Yusufzai inhabit the north slopes of the Sar Patai mountain. They are said to have 1500 or 1800 fighting men. They gave trouble to the British in 1857, and a force under General Cotton moved against them in 1858.

Isazai is a division of the Yusufzai clan.

The Akozai division of the Isazai clan of Yusufzai inhabit the western slopes of the Black Mountain on the Hazara border. They have four sections or khel, Barat, Aziz, Tansan, and Painda, and can muster 1165 fighting men. They have been troublesome on the Agror border.

The Mada Khel section of the Isazai Yusufzai inhabit the northern slope of the Mahaban. They number about 2000; their clans are the Madn, Hasan, and Bazid, but Dalazak, Gujar, and boatmen live in their country.

The Hasauzai section of the Isazai Yusufzai dwell on both sides of the Indus; those Cis-Indus on the Black Mountain, and those Trans-Indus immediately opposite it. They have ten sections, and 1116 fighting men. They murdered Messrs. Carne and Tapp in November 1851, and Colonel (now Lord) Napier led an expedition against them.

The Malizai division of the Yusufzai occupy the lower portion of the Buner valley. They number 16,000 souls, and can muster 3500 or 4000 matchlockmen.

The Nurizai section of the Malizai Yusufzai are in the south-west corner of the Buner plain.

The Daulatzai section of the Malizai Yusufzai inhabit a portion of the valley of Buner. They have between 3500 and 4000 matchlockmen.

The Nasrozai section of the Iliasai Yusufzai has the Panjpao and Makhozai as subdivisions. The Makhozai inhabit the country to the north-east of Buner, in a glen through which a tributary of the river of the Pura valley flows.

The Amazai section of the Usmanzai clan of the Yusufzai are partly within and partly beyond the British border, and are divided into two portions by a northern spur from the Mahaban. Their country is well wooded with pines, but is rough and narrow. Their fighting men have been estimated at from 1500 to 8000, the former probably correct. Malka, burnt in 1863 by General Chamberlain, is in the Amazai territory, and in 1864 (11th January) they excluded the Hindustani fanatics from their limits.

Daulatzai is a division of Amazai Usmanzai

Yusufzai in the Peshawur district, in the Sudhum valley, enclosed on three sides by hills. Their subdivisions are the Bazid Khel and Hasan Khel.

The Ismailzai, a section of the Amazai Usmanzai Mandan clan of Yusufzai, are in the Yusufzai plain.

The Akozai is a grand division of the Yusufzai, comprising the Baizai and Khwazozai, who inhabit the Swat valley; they number about 90,000 souls.

Paindah is a section of the Malizai Khwazozai Yusufzai.

Adingzai is a section of the Khwazozai Akozai Yusufzai, who inhabit the right bank of the Swat river, and a glen running north from it about 10 miles long, from the Swat river to the Laram hill. A hill on their east separates them from the Shamozai. They have forty-four villages. Their sections or khel are the Mir-Hasan, Babu, Utmanzai, Shergha, Marjan, Baram, and Umar Khel. The Utmanzai and Babu Khel redistribute their lands amongst themselves every ten years. They communicate with the Malizai by the Laram pass.

Ashi Khel, also called Shamizai, is a section of the Khwazozai division of the Akozai Yusufzai.

Malizai is a section of the Khwazozai Akozai Yusufzai who occupy the country of Panjkora. They number 8500 fighting men. They opposed the British in the Ambela campaign.

The Khadakzai section of the Akozai Yusufzai reside north of the Ranizai, on the right bank of the Swat river.

The Baizai section of the Akozai clan of the Yusufzai are mostly on the south bank of the Swat river, beyond British border.

The Jinki Khel section of the Baizai Akozai Yusufzai are on the left bank of the Swat river, with the Kohistan on their north.

The Babuzai section of the Baizai Akozai Yusufzai are on the left bank of the Swat river. They have four sub-sections, and about 1000 fighting men.

The Barat Khel is a section of the Babuzai Baizai clan of the Akozai Yusufzai.

The Azi Khel is a section of the Baizai Akozai Yusufzai dwelling on the left bank of the Swat river.

The Ranizai Yusufzai is a subdivision of the Baizai Akozai division of the Yusufzai clan, and are further subdivided into the Sultan Khan, Usman, Burhan, Utmanzai, and Ali Khels. They all reside beyond the British border. They can muster about 3000 matchlockmen. The Ranizai country is divided into Sam Ranizai and Bar or Swat Ranizai. Sir Colin Campbell moved against them in 1852.

The Aba Khel division of the Baizai Akozai Yusufzai is located on the left bank of the Swat river. They have five khel, viz. Ismail, Khasai, Zaman, Khalai, and Skhalo. The Abazai are on the right bank.

The Chagharzai tribe of Yusufzai Afghans inhabit both banks of the Indus above Buner. Their three subdivisions are the Nasrat Khel, with 800 fighting men; Firozi and Basi Khel, with 4150 fighting men. The Trans-Indus Chagharzai have 1950 fighting men.

Ghorla Khel is a name sometimes used to designate the five Peshawur tribes, Mohmand, Daudzai, Khalil, Chamkani, and Muhammadzai.

They are descended from four sons of Ghoria, son of Khar Shabun, son of Saraband. The Ghoria Khel came from Kandahar, and settled for many generations in Ghazni, from which they removed to Kābul, and afterwards to Nangrahar and Peshawur in the reign of Kamran, son of Baber; they fought with the Dilazak, and gradually got possession of the country, which they still retain, the Chamkani excepted. Their chiefs are called Arbab, lords. They are said to be more treacherous than other Pathans.

The Daudzai tribe of the Ghoria are located in the Peshawur valley, between the Khalil and Khalsa divisions and the Kābul river. The population in 1868 was returned at 37,671, almost all Muhamnadans, Syud, Moghul, Daudzai, Gujar, Khojah, Kashmiri, Khatri, and Arora. The three Daudzai sections are the Mandaki, Mamur, and Yusuf. In 1881, there were only 5898 of the Daudzai tribe returned in the Panjab.

The Khalil inhabit a portion of the Peshawur district in the plain between the Khaibar Hills and Peshawur. They are of Afghan descent. Their chiefs have the titular name of Arbab (the Arabic plural of Rab, lord). They numbered 13,595 souls in 1881. About 100 serve in the Bengal army and Panjab force.

The Mohmand tribe are partly independent, but a portion of them colonized in the south-western lands of the Peshawur district, and in 1881 numbered 44,009 souls. They are now respectable cultivators, have been lukewarm supporters of the British, and have maintained friendly relations with their neighbours, the Afridi. They have not, however, fraternized with their fellow Mohmands of the rugged, sterile, hilly country N.W. of Peshawur, against whom in 1851 a force under Sir Colin Campbell was sent; in 1854 another force was sent under Colonel Boileau; and in 1864, a third time, under Colonel Macdonell. The Pendi Ali Mohmand worried the border for the first eleven years of British rule. The six clans of the Mohmands can turn out 19,700 fighting men; Tarakzai, 2500; Halimzai, 3000; Khwaizai, 800, Baizai, 12,000; Utmanzai, 500; and Dawezai, 900. The Halimzai section includes the chiefs who hold the Panjpaol lands in the British territory near Shabkadr, and inhabit the Kamal district north of Pindi Ali. They are considered the best fighting men of the Mohmand. By 1873 only 272 Mohmands had entered the Panjab force and Bengal army.

In the Hashtnuggur division of the Peshawur district are two tribes meriting notice,—the Mian, a branch of the Kaka Khel Khatak, who are carriers, and the Muhammadzai or Mamanzai, a mixed population of 25,000 souls, who have about 5000 matchlockmen.

The Gajiani tribe of Pathans in the Doaba division of the Peshawur district are said to have come from the valley of the Kābul river, and to have ousted the Dilazak. Some of them settled at first in Bajawar, but were soon driven out by the Tarkolani.

The Parancha is a mercantile tribe of about 500 families, who are said to have come from Baghdad and settled in various parts of the frontier districts of Kohat and Peshawur. They claim descent from Nusherman. They trade from Bombay and Calcutta with tea, indigo, chocolate,

and cloth, about September, to Bokhara, and from Bokhara they start afresh for Yarkand, Tashkand, and Orenburg, and go also to the fair at Nijni Novgorod, which they call Makraia, and bring back wrought silk, Tilla and Ratiaska coins.

The Kohat district of the Panjab is on the right bank of the Indus, between lat. 33° and 33° 35' N., and long. 70° 35' and 71° 55' E. It extends 120 miles from Darwazai on the right bank of the Indus in the Khatak country, five miles below Atak, to Biland Khel on the Kuram river, at the head of the Miranzai valley. The breadth of the Kohat district is from Darwazai to Rokwan in the Shakrdara estate, where it joins the Banu district; the distance is 72 miles, a labyrinth of barren rocks and ravines of the most impracticable nature intersecting it in every direction. Its area is 1,816,000 acres, of which 1,497,760 are absolutely barren. Its rivers are the Kohat Toi and Tiri Toi. It produces sulphur, alum, and has rock-salt mines. The population of 145,419 souls consists of Sikh, Hindus, Bangash, and Khatak Muhamnadans. The Kohat defile in the Afridi hills between Kohat and Peshawur runs for miles from Fort Mackeson to Busti Khel. The Kohat district is divided by tribes into two unequal parts, viz. the northern and more fertile but smaller part, consisting generally of the system of the Kohat Toi; this is inhabited by the Bangash, while the southern, which is the larger and more desolate portion, belongs to the Khatak; it consists of the system of the Tiri Toi and the south spurs of the Khatak Hills. The British administrative divisions of Kohat are Kohat Khas (proper), Miranzai, and Tiri. The total population is 145,419 souls; of this 1808 are Sikhs, 6544 Hindus, 136,565 Muhamnadans, comprising Yusufzai, Bangash, Khatak, Orakzai, Baluch, Waziri, Syud, Moghul, Mohmand, and other Pathans, with Jat, Ranghar, Bhatti, Arora, Gakkar, Parancha, Brahman, Khatri, Bania, and Sikh.

The Kohat pass in the Afridi hills leads from Kohat to Peshawur. It runs down the bed of a stream, with a level roadway. Its width varies, and the tribes interested in it are the Bangash, Jawaki Afridi, Adam Khel Afridi, Bazoti, Firoz Khel, Utman Khel, and Sipah Orakzai, Gali Khel, Akhorwal, and Hasn Khel. In 1850 a force under Sir Colin Campbell moved against the Afridi, and since then the pass has been occasionally blockaded.

The Miranzai division of the Kohat district is forty miles long and three miles broad, consisting of numerous small well-cultivated valleys, with 26 villages. The people are wealthy in cattle, goats, and sheep. They were settled in 1855 by Brigadier-General Chamberlain, and again in 1856 and 1859. The Miranzai district comprises the valleys of the rivers Ilangu and Shikali. The tribe have 26 villages, and a population of about 24,000.

The Land tribe occupy Land Kamar in the Kohat district. They have three khel or families,—Gari, Khwazi, and Tarki. Their country is famed for its Ber fruit (*Zizyphus jujuba*).

The Banuri are a family of Syuds who have resided in the town of Kohat since the time of Aurangzeb, and the people of Swat have since paid 'ooshur' to them. They have been devoted

servants of the British, and Mir Mubarak Shah fell at the siege of Delhi.

The *Waziri*, who occupy the hill country to the west of the Trans-Indus frontier from Thal in Miranzai to the Gomal pass, claim descent from Vazir, son of Suliman. They are nearly all independent. Their total fighting strength is 43,980, viz. Utmanzai, 17,100; Ahmadzai, 9580; Mahsud, 14,500; Gurbaz, 1500; and Leila, 1500. The Ahmadzai seem to have emigrated to the Banu district about the close of the 18th century, and gradually dispossessed the Banuchi owners, coming into undisputed possession of some of the best tracts on the left bank of the Kuram. They have never allied themselves to the Banuchi. Nearly all the Ahmadzai have now settled down in the plains as good cultivators, and pay their revenue regularly. In British territory (20,742) the Ahmadzai hold 15,572 acres, paying Rs. 5864; the Vazir, 21,420 acres, paying Rs. 7670; and the Utmanzai, 5848 acres, with a rental of Rs. 1806.

Khatrak, a tribe of Pathans, 118,050 souls, who inhabit the S.E. portion of the Peshawur district, and S. and E. of the Kohat district, in a desolate region, stony and barren. Karlanrai, of the Sarban branch of the Afghans, had four grandsons, —Lukman, Utman, Zadran, and Usman, from whom tribes are sprung. Lukman's descendants are named Khatak, from a Pushtu expression, *Pah Khatar*, meaning 'he has come to grief,' in allusion to his having had Sabaka, a very ugly woman, saddled on him as a wife. Their descendants formed the Bolak, Taraki, and Tari clans of the Khatak tribe. Their country may be said to extend 120 miles along the right bank of the Indus, from Hund to Kalabagh, with a breadth varying from 7 to 65 miles. The Darshi, Kundi, Seni, Uria Khel, and Jaluzai tribes have at various times attached themselves to the Khatak. The Akora Khatak inhabit the extreme S.E. portion of the Peshawur district, and there is a Khatak colony in Lunkhor. Of 72,723 returned in the census of 1868, 56,260 were in the Kohat district, 11,400 in the Banu district, and 4735 in Peshawur. Mr. Elphinstone estimated the Akora divisions at 10,000 families, and the Tiri at 11,600; Lumsden estimated the Akora branch at 38,000 souls; Dr. Bellew gave 14,000 souls as the number of the Khatak in Yusufzai, and thinks they could turn out 3000 matchlockmen. Mr. Elphinstone described the Khatak as tall, good-looking, and fairer than any of the tribes of Peshawur. Colonel Lumsden, writing shortly after annexation, described the hill tribes as a wild, turbulent, impoverished set; but Coke noticed the Baraki and Bangi Khel Khatak as a fine hardy race, notoriously plucky, and better suited for infantry soldiers than any Pathans he knew of. During the 13th century the Khatak are supposed to have left Shal, in the Suliman range, where they resided with their kinsmen the Waziri, and settled in Banu with the Shitak, the ancestors of the present Banuchi, and they were allotted the Sadr Awal canal from the Kuram river near Adhami, which is now in possession of the Bizan Khel section of the Ahmadzai Waziri located on the Banu Thal. Towards the end of the 15th century they quarrelled with the Shitak, and left Banu and settled in the hills and plains as far as the Nilab

Ghasha on the right bank of the Indus. Malik Akhor in the time of Akbar took up his residence in the Gaozdera, a pass near Shaikh Aladad leading to the Jawaki country, and the country northwards towards Atak, and the district thus occupied is known as Akhora Khatak. Malik Akhor aided Akbar, and had grants of land conferred on him, which enabled him to become chief of the Khatak, whom he governed for 41 years, until murdered by the Balak clan. His eldest son, Yakia Khan, ruled 61 years, and was murdered. Yakia Khan's son, Shahbaz Khan, reigned 31 years, and was killed by an arrow wound in the head at Kamalzai in Yusufzai. The son of Shahbaz was the celebrated Khushal Khan, who served the emperor Shah Jahan, but was long imprisoned by Aurangzeb. When released, he abdicated in favour of his son, Ashraf Khan, after ruling 50 years. Subsequently the family continued engagements with Ahmad Shah Abdali, with the Kabul rulers, and with the Sikhs. On the British annexation of the Panjab, Khojah Muhammad Khan was confirmed in the chieftainship of Tiri, the chiefs of the Akhora Khatak obtained grants of land as jaghir and cash allowances. The Khatak as a rule have been very good subjects to the British, and in particular Khojah Muhammad, K.C.S.I., Nawab of Tiri, was uniformly loyal and well intentioned, and an unsullied example of fidelity, gallantry, and merit. The Khatak in Yusufzai are the Shabat Khel, the Mamuti, and the Mishak of Kasima and Lunkhor; the Hote of Tazagram and Lunkhor; the Yakub Khel in Lighani and Miasar; the Huseni in Charchar and Lunkhor; and the Makor in Alu and Lunkhor.

On occasions of betrothals, marriages, circumcision, they have great rejoicings, and perform the martial Khatak dance. A number of men with drawn swords revolve to the music of the pipe (*Surnai*) and drum. Their movements at first are slow and in measured time, their swords being alternately held aloft above their heads, or sweeping down towards the ground, as if to cut an enemy. These movements become quicker, the music more spirited, the dancers shout their war-cry, and swords flash through the dust and smoke as they revolve wildly round the fire, keeping it up until quite exhausted. It is worth seeing. The Khatak were mixed up with the fortunes of Akbar, Shah Jahan, Aurangzeb, Ahmad Shah, and since the 15th century the strife amongst themselves has been incessant. They are a warlike but turbulent race, but, as mentioned, have been uniformly loyal to the British. A branch of Khatak are in Yusufzai.

The Barak is a large and important branch of the Khatak, living S. of the Tiri Toi, and W. of the Sagri and Bangi Khel. They are of the Tari section, and under the British rule are all managed by the Nawab of Tiri. They possess the lands of Dares Khel, Bahadur Khel, and Latammar, the valley of Nari, all Chaontrah, the Loeghar mountains, and the country of Gudi Khel, between the Spinghar and Shinghar ranges and the tract of Land Kamar. They are a well-behaved, fine hardy race; are the swiftest footmen and best mountaineers in the country, famed for their courage. They number 5000 fighting men.

Bangi Khel are of the Bolak branch of the

Khatak, who inhabit the hills to the north of Kalabagh, on the Indus, in the Bannu district, lying between the Tiri Khatak and the Sagri Khatak. They are wild in their habits, their hills are barren and often without water; they were in old days noted robbers, but are now peaceable and well-behaved; they are fine active, athletic mountaineers, and of a frank bearing, grazing cattle and cutting wood for the markets of Kalabagh. A few are in the Panjab Frontier Force. Their sections are the Abi Khel, Tarka Khel, Tapi Khel, and Maraj Khel. Their inhospitable country has caused them much inconvenience, and led to disputes between them and the Sagri Khel of the Khatak.

Ano Khel, a section of the Tari division of the Khatak, to which the Khatak chiefs belong.

The Nasrati is a small, high-spirited tribe of Khatak, who dwell in the valley below the Shinghar range, and also pasture and cultivate the Thal.

The Babar section of the Khatak reside chiefly in Kani, on the left bank of the Indus. They have large flocks of sheep and goats, and they eat the flesh and drink the milk of camels.

The Bangash is a Pathan tribe who inhabit the Miranzai valley, the Kohat defile in British territory, and also the valley of the Kuram river in Afghanistan. They are said to be descended from a person named Ismail, who was surnamed Bankash or Bangash. Their subdivisions are the Garu, with the sections Amir, Jumshidi, and Miranzai; and the Samalzai, with the sections Tuzi, Namani, and Alizai. They are said to have come from Gardez in the Ghilzai country, from which they were driven by the Ghilzai about the 14th century. They then settled in Kuram, where they remained for another hundred years. Another account is that they came from Seistan, and are of the same race as the Jat. The emperor Baber (A.D. 1504) found them located in Kuram, which was formerly divided into Bangash-i-Bala and Bangash Paim, Upper and Lower Bangash. Since the middle of the 18th century the Turi have been gradually dispossessing the Bangash from Bangash-i-Bala, and now every Bangash attaches himself to a Turi as his Naik or protector. Their numbers in Kuram are 5600. The three main divisions of the clan are the Miranzai, with three clans; Baizai and Samalzai, with five sections. The Miranzai took up the lands of Nariab, Upper Miranzai; the Baizai inhabit the Kohat valley proper, and the Samalzai are in the wild jungle district of the same name. They are not deemed courageous by British officers. They are hospitable. They have behaved well to the British. In 1853 they claimed the right of occupying the Kotal of the Kohat pass, and their share of the pass emoluments was settled at Rs. 3200. Other accounts describe the Samalzai clan as noted for their bravery, and that they could turn out 700 fighting men.

Bangash are of the Shial sect. The 1868 census showed 31,774 Bangash in British territory. Sultan Muhammad, Barakzai, up to 1848 held Kohat as a fief from the Kabul government. It was then taken possession of by the British on account of hostility evinced during the second Sikh war. The Khan of Hungu, in the Bangash country, was in the British service as revenue

collector, when he was murdered by one of his own relatives. The khanship descended to his son. The Bangash tribe have suffered much from the raids of their hill neighbours, Waziri, Orakzai, Turi, and Kabul Khel. The Miranzai valley belonged to the fief of Sultan Muhammad, but, being an outlying locality, was overlooked when Kohat was taken possession of. The Kabul government then lost no time in arranging for the occupation of Miranzai, which appeared to have been vacated; so Sirdar Azim Khan, the governor of the Kuram province, in 1851, summoned the Miranzai to surrender, but they petitioned the British to include them in Kohat. Under the circumstances this request was acceded to. They were in their hearts hostile to the British Government, as indeed they were to any government whatever. They offered to guard the Kotal, and asserted that they had a hereditary claim, stronger than that of the Afridi, to occupy the ridge. The Kotal was then made over to them, and as the Afridi refused to open the pass, it was resolved to establish a blockade, and the Afridi were debarred from entering the Kotal and Peshawur valleys. While these arrangements in 1853 were progressing, the Guli Afridi suddenly attacked the Bangash people on the Kotal, and seized that post. Several Bangash chiefs were killed in the encounter, and Major Coke, who was present, was slightly wounded. Upon this check, the Bangash people obtained the alliance of the small though warlike tribes, Bazoti and Sipah. These were independent, and dwelt in the hills near the pass. The southern section of the Jawaki Afridi also joined the league.

The *Marwati* or *Maraoti* tribe of Pathans give their name to the Marwat division of the Bannu district; they are a branch of the Lohani tribe, being descended from Loh and his first wife Shiri. They have five khel or clans,—Bahram, Dreplara, Musa, Tapi, Nuna, and Jhandu. They were formerly pastoral, and traders in the Katawaz district of the Ghilzai country, but left it from a quarrel and tried to settle in Tank, from which the Daulat Khel ousted them, and they came on to Marwat. They are tall, muscular, and fair, often rosy-cheeked, and evidently of pure Afghan blood, forming a striking contrast to their mongrel neighbours the Banuchi; they are a bold, manly, simple, and upright people, deeply attached to their sandy villages and reed huts. They are proud, but dignified, and frank and simple in their manner with strangers, and are distinguished from all the Pathan tribes by a more generous treatment of their women.

Their country is excessively arid; the water is so far below the surface, they cannot afford to sink wells to it. Their women are the water-carriers. At the census of 1868 they numbered 42,729 souls, and their sections in former days could turn out 5500 fighting men,—Bahram, 2000; Dreplara, 2000; Musa Khel, 1500.

Bannu, in lat. 32° 15' to 33° N., and long. 70° 20' to 71° 20' E., a district in the Panjab, 60 miles long and 55 miles broad, with an area of 2036 square miles. Its Trans-Indus portion is bounded N. by the Khatak hills, W. and N.W. by the hills of the Waziri, S. by the Batani and Masrot ranges, and E. by the Indus. It is surrounded by barren hills, but is a highly fertile valley;

in spring a vegetable emerald, and in autumn clothed with crops growing from lacustrine calcareous clay often 40 and 50 feet deep. The climate is feverish. The population is about 200,000, mostly agricultural—Baluch about 70,000; other Muhammadans, 100,000; and Hindus, 200,000. The chief towns are Edwardsabad, Iaki, Isa Khel, and Kalabagh; their houses built of mud, with a Chouk or place of assembly, and a guest-room. The people are dirty. They are strict Muhammadans.

Isa Khel is a division of the Banu district, enclosed between the Indus and the Khatak hills. Most of the inhabitants are Niazi; but the Awan, and Jat, and Hindus are intermixed. Many of the Niazi are migratory.

The sanatorium of Shekh-Budin, in lat. $32^{\circ} 17' 49''$ N., and long. $70^{\circ} 50' 49''$ E., and 4516 feet above the sea, is on the Mohar range in the Banu district, 64 miles south of Banu.

The Banuchi or Banuwai is a mixed tribe occupying the Banu subdivision of the Banu district. The people have come from all the surrounding lands, and their stature and appearance are of the most varied kind; most of them are spare, without much muscular development, attributable to the malarious climate. They are morally a low, vicious race, very litigious and untruthful. The Waziri, the Marwati, and Isa Khel are as different from them in character as in race.

The Umar Khan Khel, one of the clans of the Bairam Maorat, occupy the Agzar Khel village in the Banu district.

The Niazi is a tribe of Afghans settled in the Banu district, descendants of Niaz Khan, son of Lodi, king of Ghor, by his second wife Takia. Lodi was the Lohani chief who invaded Hindustan, A.D. 15 (A.H. 955), and conquered the Daman; and the Isa Khel districts were allotted to Niaz, whose descendants still occupy it. The Niazi, like most of the Lohani, are divided into an agricultural and a Povinda portion. The agriculturists are all in British territory; their sections or khel are the Isa, Kamar, Kundi, and Sarhang. The Povinda have five branches, and trade between Khorasan and the Dehrajat. Their sections or khel are the Mamrez, Nur Khan, Mahsud, Ali, and Mala. The Niazi are good loyal subjects. They have no money expenditure at their marriages. The Michan Khel section of the Niazi hold villages in the Banu district. They are Shaikhs, and very wealthy.

Tor and *Spin* are two factions on the Banu frontier. They originated from the quarrels of two Banuchi, Sarke and Ibrahim, in which all the tribes got involved. Those who sided with Sarke were called Sarke Gundidar, subsequently Koha Gundi, and afterwards Tor Gundi; they comprise 32 sections. The Spin faction embraces 27 sections; they were first called Jan-behdar, afterwards Noya Gundi, and lastly Spin Gundi.

The *Dehrajat* is a portion, about two-thirds, of a narrow strip of land which extends along the west bank of the Indus river, about 800 miles from the Kalabagh range to the N. boundary of Sind, and hemmed in between the Suliman range and the Indus. The three portions of the Dehrajat are the Dehra Ismail Khan, Dehra Ghazi Khan, and Dehra Fattah Khan. A thin fringe of cultivation and jungle extends along the bank of the great river,

and terminates, as you advance into the interior, in a flat desert country, where a precarious supply of water from the hills affords a poor cultivation in the vicinity of the thinly-scattered villages. Lower down, the hill streams become smaller, and the aspect of desolation still greater, so that for miles not a human being is visible, nor can a drop of water be procured to quench the thirst produced by these scorching plains. The Pathan and Baluch tribes who inhabit the hills, have the same attachments to their chiefs, internal hereditary feuds, dislike to combination, and predatory habits, which distinguish so many mountain races, but have withal a martial bearing and love of independence. The scarcity of water limits cultivation, and their wealth consists in their herds, which find a scanty pasturage at the foot of the hills. Amongst the mountains occur a few fertile patches. The country being traversed by foot-paths known only to themselves, the hill tribes were accustomed to issue from it in raids on their wealthier neighbours in the plains, harrying their cattle, and retreating in safety to their impracticable mountains. To stop this, in the beginning of 1857, after one of such inroads, the Panjab Government sent an expedition from amongst the troops of the Panjab irregular force, to reduce the Bozdar tribe; and names known to fame in the Indian mutinies—Chamberlain, Coke, Nicholson, Hodgson, Probyn, Watson, Wyld, and Green—were all trained in this school of warfare, involving severe marches, incessant fights, and exposure to all the seasons of the year.

Baluch tribes extend along the lower half of the Dehrajat frontier; they are less warlike, and are more or less migrant and predatory, particularly in the west. In habits they resemble the Iliyat and Kurd. They have dark skins; live in mud houses, in forts, and in their black felt tents called *gedaun*, stretched over a *tamarisk* framework. An assemblage of *gedaun* forms a *toman* or village, inhabited by a *khel*, and a tribe consists of a certain number of *khel*. The headquarters of Baluch tribes, and the majority of the clansmen, are in the independent hills beyond the British territory, the boundary line of which runs along the base of the hills; but a large number of each tribe also hold lands in the plain, and are British subjects, some of the chiefs also residing there. The Baluch of the plains, for the most part, after annexation, behaved as well-disposed subjects, but the Baluch of the hills continued their old habits of plundering. All the tribes were at feud with each other; they not only fought in the hills, but they carried their contests to the plains, where they attacked all villages except those belonging to their own tribe. The men of the plains usually resisted the attacks with spirit at the time, but they were not allowed to retaliate afterwards, as they used to do under the Sikh rule. To guard British villages and people from their constant aggression, a strong cordon of military posts was fixed along the base of the Suliman range. The marauding parties were 50, 100, 200, 300, occasionally even 500 strong. They were often mounted, and fled, if hotly pursued, for 15, 20, and even 30 miles. Many of the villages and much of the cultivation being close to the hills and in front of the posts, the plunderers carried off their booty to the hills before the detachment could come up.

INDIA PROPER, THE DEHRAJAT AND DAMAN-I-KOH.

Dehra Ismail Khan is a British district lying between lat. 31° and 32° 15' N., and long. 70° 20' and 71° E. On the south it joins Dehra Ghazi Khan, and the boundary marks the separation of the Pathan and Baluch frontier tribes. The eastern boundary is the river Indus. The general aspect of the country is that of a dry alluvial plain, destitute of all vegetation, and intersected by the ravines of the hill feeders of the Indus. The irrigation canals are small. The area is 3777 square miles. The cultivators are Pathans or Jats. The Multani Pathans have been loyal to the British; the others are the Gandapur, Mian Khel, Daulat Khel, and Babar. Pushtu and Panjabi are spoken. Its population comprises Christians, Syud, Moghul, Saldozai, Alizai, Popalzai, Waziri, Pathan, Laghari, Baluch, Bozdar, Kosah, Kasrani.

Dehra Pattah Khan, a small town in lat. 31° 7' 9" N., and long. 70° 46' 39" E., is 532 feet above the sea. It is on the right bank of the Indus, and 53 miles south of the capital of the district. The rainfall is very precarious.

Daman-i-Koh is a tract of country stretching along the foot of the mountains west of the Dehrajat, inhabited by Afghans, Jat, and Baluch.

The Mandu Khel is a small peaceable agricultural tribe to the west of the Dehra Ismail district, numbering 3000 souls. The Multani Pathan tribe are in Multan, Dehra Ismail Khan, and Dehra Ghazi Khan. They are descended from the Abdali, who came in the times of Alamgir and Aurangzeb. They have been friendly with the British.

Gandapur, a tribe who inhabit the Daman of the Dehrajat in the vicinity of Kolachi, Takwara, and Luni. They are peaceable British subjects, in the Dehra Ismail Khan district. They numbered 5945 in 1868. The Kolachi division and town of the Dehra Ismail Khan district are occupied by the Gandapur, the Mian Khel, Babar, and Baluch, along with Syud, Koresh, and Hindus. The Gandapur clan were formerly in Afghanistan, but abandoned it and settled near Kolachi. They are hospitable.

The Kundi is a quiet agricultural tribe of Pathans, in the N.W. corner of the Dehra Ismail Khan district. They claim descent from Lodi, the founder of the Lohani tribe, whom they accompanied into the plains. They have about 1000 fighting men.

The Mian Khel tribe, in the Dehra Ismail district, are a section of the Lohani. Their two sections are named Isot Khel and Sein Khel.

Isot or Sot are nomade Pathans on the hills to the west of the Dehra Ismail Khan frontier. They are said to be of Kakar origin. They have no towns or villages, and have about 300 fighting men. They remain about the slopes of the Tiri hill in summer, and in winter migrate to Kaliwahin, on the western slopes of the Nara. They have four sections.

Khar Sin or Ghar-shin tribe are harmless and inoffensive Syuds, who reside among the Ush-tarani on the frontier of the Dehra Ismail district, also among the Kakar of Peshin, and among the Murree. They are pastoral and agricultural. They are a branch of the Khar Sin of Uch and Ahmadpur, in the Bahawalpur territories, with whom they came from Bokhara in the 18th century.

The Hari Pal tribe on the Dehra Ismail frontier, on the borders of Spasta. They are fakir, and about 800 in number.

The Kapir are a poor agricultural tribe to the west of Draband on the Dehra Ismail frontier. They are peaceable, and sow sorghum and maize, and have fruit-trees.

Zmara, a small tribe of the Dehra Ismail frontier. They have the Ush-tarani on the east, the Isot on the south, the Shirani on the north, and the Musa Khel on the west.

The Miani tribe are in the Gomal valley, in the Dehra Ismail Khan district.

Belot, in lat. 32° 15' 20" N., and long. 71° 11' 51" E., has the shrine of Shah Abdul Wahab. It is in the Dehra Ismail Khan district, on the right bank of the Indus. Two Hindu shrines are near.

The Butani is an Afghan tribe dwelling in the Dehra Ismail Khan district in the hills near the Peyzu pass. They were predatory until they became British subjects.

The *Dehra Ghazi Khan* district of the Panjab is situated between lat. 69° 20' and 71° N., and long. 28° 20' to 31° 10' E. Its area is 6530 square miles, or, according to Captain Barron, 5256. It has four divisions, viz. those of Saugor, Dehra Ghazi, Jampur, and Mithankot. It has Sind lands, or those along the banks of the river, and Pachad lands, or those within the influence of the hill streams. The mountain peaks rise to 7640 feet. It has many mountain streams, and 13 canals. Its population in 1868 was 308,840 souls.

Europeans,	54	Siyil,	72
Eurasians,	10	Others,	21
Native Christians,	2	Jat,	162,519
Muhammadians, viz. :		Gujar,	36
Syud,	5,324	Khojah,	635
Moghul,	171	Ibrahman,	1,483
Saldozai,	98	Khatir,	2,038
Alizai,	73	Rajput (Hill),	121
Popalzai,	110	Bania,	92
Other Pathans,	2,750	Arora,	33,024
Laghari,	11,311	Bhatia,	410
Bozdar,	1,241	Kayasth,	6
Mazari,	5,422	Sudh,	551
Lund,	7,523	Labana,	1,464
Kosah,	13,348	Jat,	600
Dreshuk,	3,757	Alhir,	15
Kasrani,	2,938	Other Hindus,	727
Other Baluch,	47,050	Bhoti,	80
Muhammadian Rajputs, viz. :		Miscellaneous Tribes, 4,576	
Bhati,	142		

The Bakhtiari tribe who inhabit a portion of the Dehrajat round Draband, are said to be a branch of the Bakhtiari of Persia. They have about 1300 houses.

Dehra Din Panah is in the Saugor division of the Ghazni district, 44 miles north of Ghazni. It is two miles from the right bank of the Indus. Abdul Wahab, canonized as Shah Din Panah, is buried there, and his shrine is visited. He was a native of Uch in Bahawalpur. He died in the 16th century.

The Pastrani, according to Major G. Jacob, a well-educated, peaceable tribe, who inhabit the hills at the extreme north of the Dehra Ghazi Khan district.

The Nutkani is a Baluch tribe in the Dehra Ghazi Khan district, inhabiting the country S. and E. of Mangrota. They have been estimated to have from 800 to 3000 adult fighting men. Their country is fertile. They claim to have come from Aleppo.

The Mazari, a Baluch tribe, is in the extreme S. of the Dehra Ghazi Khan district. Their four sections are the Baluchani, Rustamani, Masidani,

and Sargani; some of them are in Sind, and they number 5422 souls. They have even been notoriously predatory, and up to 1870 gave trouble to the British.

Lund of Tibi is a Baluch tribe in the Jampur division of the Dehra Ghazi Khan district. They have Gorchani plain on the N.E. and S., and Durkani on the W. Their three sections are the Lund, Rind, and Kosa. They are a compact tribe, with about 952 fighting men.

Lund of Sori is a Baluch tribe who inhabit the extreme northern portion of the Dehra Ghazi Khan district. Their six divisions are Hyderani, Bakrani, Zarani, Gar Surani, Kilani, and Gurchani. Their number in 1868 was 7523, and their fighting men about 2000. They received from the British Rs. 300 monthly to protect the passes.

Laghari, a tribe on the frontier of the Dehra Ghazi Khan district, from the Dalana on the N. to the Kura pass on the S. Their four sections are Aliani, Hadiani, Bogiani, and Haibatani, in all 11,311 in 1868, with about 3770 adult males. They claim relationship with the Talpurs of Sind.

Kosah, a Baluch tribe scattered through the Dehra Ghazi Khan border, with seven divisions, viz. Balclani, Jangel, Jandani, Jarwar, Isani, Tomiwal, and Merwani. The population is about 13,348, with about 1500 fighting men. The tribe is brave, but the chief's house much divided against itself.

Khetran is a Baluch or a Pathan tribe, and are about 13,746 in number, who inhabit the hills to the west of Dehra Ghazi Khan, and have a branch within the district. They have the Musa Khel and Luni Pathan on the north, the Bozdai on the north-east, the Laghari and Gurchani on the east, with the Murree on the south-west and west. Their country drains into the Kaha river, and is of large extent. They have four sections,—the Ganjura, Dariwal, Hasani, and Nahr,—with many subdivisions. They have about 4582 fighting men. They live inside forts, and are not warlike, but are expert riders and swordsmen. Their country is a succession of picturesque fertile valleys with barren mountains.

The Kasrani Baluch tribe are in the extreme north of the Dehra Ghazi Khan district, also in the southern portion of the Dehra Ismail district, and the hills to the immediate west of these tracts. Its divisions are the Lashkarani, Khubdin, Bhada, Wasusani, Laghari, Jarwar, and Rustamani, with numerous subdivisions, with about 1549 fighting men. A force under Brigadier Hodgson was sent against them in 1853.

The Adamani section of the Kasrani is settled at Jok Budhu in the Dehra Ghazi Khan district. They are now peaceable.

Gurchani, a Baluch tribe who inhabit the Jampur division of the Dehra Ghazi district near Harand. They have twelve sections, with about 3936 souls, and 1312 fighting men. They gave much trouble since annexation.

Dreshuk, a Baluch tribe of Dehra Ghazi Khan. Their divisions are Kirmani, Mingwani, Gondfaz, Sargani, Arabani, Jaikani.

Nahar, a tribe who live partly round Harand in the Ghazni district, and partly round Nahar ka Kot in the Khetran hills. They say they came from Afghanistan.

Of the other Baluch tribes in the Dehra Ghazi Khan district, a mere mention will suffice. They

are the Amdani, Chandia, Giskoria, Ghoramani, Gopang, Hut or Hoth, Laskani, Malkani, and Mastui. Beyond the Dehra Ghazi Khan border are the Pathan tribes Khastai and Luni. The Khastai are little numerous, are peaceful and quiet; they are agricultural and pastoral.

The Luni speak a mixture of Pushtu and Baluch, and have 1200 men. The Chum, a long range of hills, produces a valuable coal, also sulphur. Their neighbours on the north are the Kakar and the Musa Khel, on the south are Murree and Tarin, with Khetran on the east.—*Aitchison's Treaties; Asiatic Researches; Bellew; Burnes' Cabool; Burton's Scinde; Calc. Rev.; Campbell's Eth. of India; Chesney, Euphrates Expedition; Chronicles of Kashmir; Collett's High Asia, Bokhara, and Baluchistan; Cunningham's Sikhs; De Bode's Tr.; Elphinstone's Cabul; Ferrier's Travels; Fosherry, in Journ. Eth. Soc.; Hist. of Afghans; Latham's Ethnology; Leach, Vocabulary; MacGregor's High Asia and N.W. Frontier; Masson's Journeys; Medley's Year's Campaigning; Mohun Lal's Travels; Moorcroft's Travels; Peschel's Races of Man; Panjab Frontier, by an Official; Panjab Report, in Records Gov. of India; Pottinger's Baluchistan; Prinsep's Antiquities by Thomas; Raverty's Afghan Language; Rennell's Memoirs; Taylor and Watson's People of India; Thomson's Travels; Tod's Rajasthan; Townsend's Outram and Havelock; Vigne, a Personal Narrative; Wood's Lake Aral; Yule's Cathay; Census of 1881.*

SIND is a province of British India, between lat. 23° to 28° 32' N., and long. 66° 43' to 71° 15' E. It is on both sides of the lower course of the Indus and the delta of that river, and is bounded on the north and east by the Panjab and Rajputana, on the south by the Arabian Sea and Rann of Cutch, and on the west by Baluchistan. Its maximum length is 350 miles, and greatest breadth 280 miles. Its area is 48,014 square miles, and population in 1881, 2,413,823. It is under the Bombay Government, and is arranged for administration into the five collectorates of Kurachee, Hyderabad, Shikarpur, Thar and Parkar, and the Upper Sind Frontier. But a good deal of the province is hill and desert, the fertile plains being in the valley of the Indus. The density of the population varies greatly, being 2.19 per square mile in the Kohistan of the Kurachee collectorate, 15.9 in Thar and Parkar, 85.2 in Shikarpur and in that of the Hyderabad taluk of the Hyderabad collectorate,—the average being 50.3 to the square mile.

It has been repeatedly overrun by conquering armies,—by Alexander of Greece, B.C. 327, by the Bactrian Greeks, by Indo-Scythic tribes, by Hindu or Rajput dynasties, by the Arabs of the khalifat, and by Mahmud of Ghazni. After his time it was subject to perpetual incursions from the Ghoris, Khiljis, and Taghalag dynasties of Delhi and the Panjab, and the Moghul rulers of India, descendants of Baber; Persian, Afghan, Baluch, and the British, have each in succession had dominion over it, and it is now a British province.

Three thousand years of continuous changes of races and of dynasties have peopled Sind with multitudinous tribes and clans, many of them till lately predatory, numbers of them handing down blood feuds for generations, the bolder and stronger striving with the sword to win more fertile lands, and all of them being pressed forwards by ever

INDIA PROPER, ITS SIND PROVINCE.

succeeding conquerors, till stopped by the great river Indus or the sea.

The first task of the British was to establish

order, and this was successfully attained by disarming the population, which in 1881 was as follows:—

	Hindus.	Muhammadans.	Christians.	Jains.	Parsees.	Jews.	Sikhs.	Aborigines.	Total.
Kurachee, . . .	68,975	390,067	4674	9	960	106	10,819	3,050	478,688
Hyderabad, . . .	89,114	594,485	428	144	21	31	42,940	27,400	754,624
Shikarpur, . . .	93,341	684,275	736	...	64	9	68,655	5,892	852,086
Thar and Parkar, . . .	43,755	109,194	14	1038	...	4	898	48,440	203,344
Upper Sind, . . .	9,894	109,183	230	...	9	3	3,664	1,198	124,181
Total Sind, . . .	303,079	1,887,204	6082	1191	1063	153	126,976	86,640	2,413,823

One of the races still present, the Med or Medi or Mand, is noticed, B.C. 40–30, by Virgil, who calls the Jhelun Medus Hydaspes. They were not one of the five tribes of Yuchi or Tochari mentioned by Chinese writers, but seem to have belonged to the great hordo of Su or Abar, who entered India B.C. 126, and gave their name of Indo-Scythia to the province. They seem to have been forced to migrate from the Upper Panjab to Sind. The earliest of the Muhammadan writers notice that they were firmly established in Sind by A.D. 250, along with their ancient rivals the Jat. Ibn Haukal describes them in his time (about A.D. 977) as occupying the banks of the Indus from Multan to the sea; and there can be no doubt that they are now represented by the Mer of the Aravalli range to the east of the Indus, of Kattyawar to the south, and of Baluchistan to the west. Edrisi describes the Mand as a numerous and brave tribe who occupied the desert on the borders of Sind and India, and extended their wanderings as far as Alor on the north, Makran on the west, and Mamehel (or Umakot) on the east. Ibn Haukal records that 'the Mandas dwell on the banks of the Mihran, from the boundary of Multan to the sea, and in the desert between Makran and Farnhal (or Umakot). They have many cattle-sheds and pasturages, and form a large population.' Rashid-ud-Din locates them in Sind at a still earlier period. According to his account, Med and Zat, two descendants of Ham, the son of Noah, were the progenitors of the people of Sind, prior to the Mahabharata. The name is variously written as Mer, Med, Mand, in all of which forms it is found even at the present day. To these General Cunningham would add Mind, which is the form of the name given by Masudi. He identifies this people with the Medi and Mandrueni of the classical writers; and as their name is found in Northern India from the beginning of the Christian era downwards, and not before that time, he concludes that the Mandrueni must be the Saki Indo-Scythians who occupied the Panjab and Sind, and who, under the names of Mand and Zat of the early Muhammadan authors, were in full possession of the valley of the Indus. Lastly, Wilford's surveyor, Mogal Beg, writes Mandiyah, which is also a form that he received from two different persons; while in General Court's map it is spelt Mamriah. To this people General Cunningham refers the name of Minnagar, or 'city of the Min,' which was the capital of Lower Sind in the second century of the Christian era. That Min was a Scythian name in use is known from its occurrence in the list of Isidor of Kharax as one of the cities of Sakastene or Sejisthan. The actual position of Minnagar is unknown, and there are but few data to guide us in attempting to fix its site. If he be right in identifying Minnagar, or the 'city of the Min,' with

Maunabari, or the 'place of the Mand,' he thinks there can be little doubt that the great Indo-Scythian capital was at Thatha.

The following list of the tribes and races in Sind was prepared by General Merewether, and it is believed to be very accurate:—

KURACHEE COLLECTORATE, 478,688.

Synals.—Shirazi, Shakrur, Alavi, Mashedi, Maiind-rani, Arifi, Rezuri, Bokhari, Amirkhani, Lukalivi, Mutalivi, Istrabadi, Khabroti. Their forefathers came to Sind from different places on the Asiatic continent.

Kureshi, viz. *Alvi*, descended from Ali, from Iran.

Abasi, derived from Abbas, from Irak.

Sidiki, " " Ababakr Sidik.

Furuki, " " Umar.

Usmani, " " Usman.

Baluch.—Kind, Jutto, Chandia, Nuhani, Khosa, Chang, Lushari, Kupri, Julbani, Gungani, Nizamani, Alman, Gopang, Mungwani, Dluwani, Sunjrani, Jamali, Jurwar, Kolachi, Pitabi, Mugsi, Murreo, Khowad, Daruck, Laghari, Muheaur, Talpur, Bugdi.

The Kind tribe is the head of all the Baluch from Baluchistan, and from them the several tribes are said to have descended. The Talpur, however, became rulers in Sind, while the Kind remained dependents. The Baluch generally are said to have come originally from Aleppo in Syria. They have all the characteristics of Arabs,—sharp, well-defined features, and well-knit limbs. All their divisions merely denote families or descendants of men of renown, whose names the families bear.

Karamati.—Pubrani Muhammadans, Bighal, Gubole, Bayi, Kachri, Kumba, Mugra, Ahmadani, Ruzida, Supad, Murwa, Ladia, Muhari, Sahtia, Allura, Jingiani, Morsur, Biramani, Khirturi, Thuan, Rajwani, Sotiani, Parwari, Chirani, Gocha, Ralwani, Gorewani, Sherik-hani, Mindiar, Goramani, Kulri, Mochir, Sholani, Bunbani, Dewani, Jamali, Said, Durayai, Toremani.

These have descended from Baluch tribes, but are subdivided into several sections named.

Asundi, descendants of a tribe from Multan.

Moghul, " " Persia.

Turuk or Turks, " " Khorasan.

Afghan, " " "

Sumra claim to be descendants of Samra; their sections are Kumirpota, Mitopota, Budipota, and Norungpota. 'Samra' has been corrupted into 'Sumra,' and under this the several tribes are found in the Kurachee collectorate. They came to Sind about Hijira 445, and became the rulers of the province in 609, from which year they were in power up to 761, when they were overthrown by the Summa.

Summa.—Buda, Shora, Suhta, Agil, Ottur, Amra, Hajana, Rathor, Puria, Janspuwar, Nalica, Charshu, Sind-Summa, Chugra, Butti, Koraja, Notiar, Udhar, Utha, Lukha, Muhur, Sutia, Potor, Jund, Unur, Babria, Dungua, Guba, Phul, Lukha, Munappa, Munabiya, Kaka, Tukhra, Pulli, Kandbhir, Musru, Summa, Sumaja, Notia, Abra, Wahud, Nahia, Phul-nabia, Koria, Dissur, Mindra, Ludia, Odbaja, Kidri-Pota, Lund-Summa, Kakaja, Nara, Jaraja, Hingora, Jugia, Virriah, Hingaja, Derra-Sumani, Halla, Udba-hingora, Jasingora, Ramabey, Sahad-Summa, Tellaruja, Nuria, Hapra, Rahuja-Juna, Granoo, Rahawa, Lukbatia, Sumra, Jamlakha, Sudaria-Summa, Juna-Summa, Budio, Sahab-Summa, Oto-Summa, Shokhab-Summa, Biya, Bodia-Chellaria, Mungra, Abraja, Cur-Hingora, Sultanote-Numria, Jokia, Jutti, and other sections.

Summa now claim to be descendants of Ham, son of

Noah. They were the early inhabitants of Sind, and were in power as rulers, from Hijra 752 to 927, when they were overthrown by the Arghuni.

Arghuni came to Sind during the reign of the Summa, whom they overthrew. They succeeded the Summa as rulers of Sind about the year 927 Hijra, and continued so until their defeat by the Turkhani in Hijra 962.

The *Turkhani* came to Sind about the same time. They succeeded the Arghuni as rulers of Sind about the year 962 Hijra, and were in power until Hijra 1021.

Foreign Tribes.—Tukzi, Tumini (Thainr), Alt-Mogela (now known as Moria), Powanhar, Jubisia, Alutha, Binwalla, Sufean, Koral, Bayar, Supia.

Descendants of Harun.—Mukrani, Ludi (now known as Ladia), Hubsha, Sidi, Jungani.

Sindi Musalmans, viz. Nakhuda, Machi, Solangi, Mochi, Memon-Khowaja, Memon-Sayata, Guda, Chutwan, Awan.

Brahmans.—Kokanist and Deshat from the Dekhan, Gujarati and Nuggur from Gujerat, Gowar, Sarsat (Sindi), Pokarna from Jeysulmir.

Khatris or Khastri, containing the tribes Wania, Kanuga, Amil, Merani, Gadi, and Mahajan.

Miscellaneous Hindus, viz. Doghra, Rahtor, Meghwar.

HYDERABAD COLLECTORATE, 751,624.

Baluch.—Talpur, Rind, Lashari, Laghari, Jamali, Murree, Chandia, Hajana, Nizunani, Khosa, Gubole, Gadi, Mugsi, Kunbhiri, Kuppi, Nuhani, Buglani, Chulgr, Hote, Nadani, Chang Juttai, Porkhurri, Lund, Julbani, Kurmi, Dewani, Mubrani, Rusmani, Mushori, Kullo, Zore, Kolachi, Buldi, Mungaja, Ruse, Bhurgri, Jiskani, Mari, Surgani, Lakhani, Hishani, Gubcham, Khatran, Sanjani, Rustomani, Bozdar, Janwari-Shaer, Amandani, Karmatti, Zindpuri, Shahoni, Korai, Dulwani, Sukrani, Nath Koni, Gurchani, Daidano, Dreshuk. The same remarks apply here as to the Baluch in Kurachee.

Peers.—Nakshbandi, Julbani.

Samra.—Cultivators and oil manufacturers.

Spids.—Rozvi, Bokhari, Barawala, Mutalavi, Cutchi, Sunami, Lukiyari, Nagori, Qurani, Shirazi, Khabrati.

These are the landowners and extensive cultivators. Originally came from Arabia and Persia 700 years ago. The several divisions derive their names from some distinguished ancestor, or from the place where they originally lived, or where they settled down when they came to Sind. Rozvi from Imam Musa Raza, Shirazi from Shiraz, Lukiyari from Lukki.

Kureshi.—Abasi, Usdi, Kallora, Qazi, Insari, Dukhiya, Sidiki, Faruqi, Alavi, Hunzori. The Qazi are cultivators and scribes. Originally came from Syria.

Sumatra or Sumna.—Summa, Unar, Abia, Gandhai, Sahta, Dhera, Mitira, Bhawwar, Sethore, Bhata, Dalia, Bhawwari, Setharus, Nangor, Mangria, Gangra, Kiria, Haliah, Hariah, Gundali, Nulipotra, Udyan, Mahiar, Pima, Tunia, Depar, Lakha, Parihar, Chana, Agara, Chachok, Patu, Sadar, Phail, Dahari, Bihan, Wagan, Buriara, Detha, Manlahan, Mahisar, Bughia, Kakepotra, Dahraja, Bhan, Malak, Laujara, Pali, Wara, Theba, Hathipotra, Sukhra, Gaba, Hingora, Rahu, Kaka, Juneja, Kaurija, Vistara, Wasan, Aradinja, Chanika, Juna, Kanreja, Sirachaja, Maira, Bhanoja, Mamar, Dokeja, Manahin, Buga, Bhurt, Halliputa, Powahar, Subeja, Shora, Sumra, Numriah, Jokhia, Kalur, Pullija, Jugsia, Thora, Sama, Ghunchur. The above are cultivators—Aborigines.

Shiikh or Memon.—Hudokut, Qazi, Khebrana, Surha, Akhund, Patoli, Katiyar, Puggir, Lusi, Bandru, Kusabi, Mirzapuri, and Khowaja.

These, originally Hindus, are cultivators, shopkeepers, workmen, etc. Distributed throughout the collectorate. The Khwaja descended from the Memons, but are Shiaks, and call themselves descendants of Khwaja Suliman Pharisee.

Gola.—Shidi, Halshi, Khaskeli, Sindi, and Zeinghur. These were slaves in former days.

Khowaja were also converted Hindus.

Khaskeli are the descendants of slaves purchased by the Baluch and others from foreign countries.

Raza, Lohar, and Wadha or Dahkan, are different tribes, and are called from the trades they follow.

Dhobi, Pujara, are of varied origin.

Kalri, Kori, Mochi, Sonara, and Thathara. Some foreigners and some Sindi.

Muhana, Baleshahi, and Machi. Machi and Shikari are the lowest of the Sindi tribes, and are generally cultivators and fishermen.

Miscellaneous Races. viz. Gurji, Mungri, Khokur, Hore wala, Duhgur, Puri, Patan, Silawut, Sati, Pinjora, Chaki, Lakhati, Dhobi, Kumagur, Nukash, Solungi, Raza, Lohar, Matchi, Zardoze, Dhangai, Bazai, Nagori, Khudhari, Buthora, Hajjam, Siyl, Bura, Girana, Ghuryalehi, Kunjur, Gahi, Marwai, Korai, Sivil Kudra, Sahita, Maganhar, Hulya, Rajpur, Chabuk, Dahuri, and Bubbur, Dyntra (Canzat), Syal, Baber, Julwar, Samtra, Mushori, Naich, Subag, China, Buk, Dul, Panihar, Subaki, Jora, Lishari, Goracha, Pifea, Isran, Setar, Bhangir, Watia, Tagar, Ghanga, Dashk, Motmal, Zurdoni, Nancal, Dridona, Majdona, Vidyola, Dangroj, Nongraj, Jokhia, Khokhar, Hatar.

Brahmans.—Gowar, Drawar, Barhi, Bawanjahi, Seikar, Silar, Kawunchundra, Sarsad, Pokarna, Kitri, Sydpar, Dukhni, Purbi, Maharashtra, Tilung, Carnatic, Kokunt, Gujur, Surisali, Pokumi, Purli, Gund, Sarseddi, Canouj, Kankabhi, Mital, Brahmaput, and Bhuchak.

Khastri.—Mangoh, Munijan

Warsi.—Lohana, Bhata, Bhabina, Amil, Panjabi, Mahesirri, Usnwar, Suhwani, Khalsa, Shahdadpuri.

Khatris.—Gurupota.

Sutar.—Khutti, Sonara, Sutar, Bagoi, Sochi, Lohar, Mochi, Tumbuli, Kalal, Jakhiri, Jeysulmirani, Kurmi, and Ode.

Lohana and Sarsut Brahmanas, descended from Sri Ramechund, Pokarna, Babra, Panjabi, Khudabadi, Sehta.

Udasi and Sunnasi.

Sonaras, descended from Deni.

Hindu Ascetics, viz. Sunnasi, Byragi, Jogi, Jangam, Udasi, Bhagat, Barra, Thukur, Bhut, Jajak, Brahma chari.

SHIKARPUR COLLECTORATE, 852,986.

1. Syud; 2. Pathan; 3. Moghul; 4. Brahui; 5. Baluch; Rind, Juttai, Talpur, Chandia, Khosa, Laghari, Mugsi, Buldi, Lashari, Julbani, Lund, Jamali, Buglani, Bugti, Mazari, Gadi-Dundki, Nizamani, Bang-Jakrani, Dumki.

Jhut, Surrai.

Sindi, Abia, Kallora, Pholpota, Gopang, Mussem, Porur, Syal, Soda, Bugia, Buddia, Sukta Turrio, Machi, and Bhutto.

Hindus.—Brahman, Chuttri, Bunya, Amil, Thakkur.

UPPER SIND FRONTIER, 124,181.

Baluch.—Tribes the same as given above, viz. Rind, Dumki, Jakrani, Murree, Bugti, Lashari, Gurhani, Mazari, Burdi, Cosah, Jamali, Mugzi, Chandia. These people have all the characteristics of Arabs, both in features and customs. They are restless and unwilling to labour, but will undergo the most wonderful fatigue for the purpose of stealing a camel or bullock. They have sharp, well defined features, and very spare but well knit bodies and limbs. All their traditions agree that they originally came from Syria, probably about 1200 years ago.

Khykari are a priestly set who attached themselves to the Baluch on their way eastwards from Aleppo, joining them from Tabreez. In importance among themselves, the Baluch rank as follows:—

1. Rind; 2. Lashari; 3. Jutoi; 4. Dumki; 5. Jakrani; 6. Murree; 7. Bugti; etc.

Brahui.—These have a different origin from the Baluchi, and have remained for the most part in the mountains of Baluchistan, giving the khar to the country. The traditions of the Brahui are not so clear as the Baluch, but they came also from the west, entering Baluchistan from Kirman, by Makran.

Jhut.—This is a wandering race, but attaching themselves to Baluchi and other tribes. They were generally Hindus; are squarer and stouter in their build, and have broader features than the Baluch. They are all camel breeders and dealers.

Hindus.—Are principally of the Bunya caste.

THUR AND PARKUR, 203,344.

The Thur and Parkur district is inhabited by Hindus and Musalmans, more equally divided than in any

other part of Sind. Each of these include several tribes which are divided into classes. Their manners and customs resemble those of Cutchi. They are naturally active. The chief occupation is breeding and grazing cattle, for which they evince greater preference than for agricultural pursuits. The language in use is a combination of Sindî, Marwari, and Gujerati, and is called Dati. In some parts of the district they carry on business in Gujerati, but the generality use the Dati, with which they are more familiarized.

1. Syuds; 2. Baluchi, viz. Rind, Chandi, Gurgage, Kullohi, Banglani, Dulwani, Sugrani, Dhownki, Leghari, Nattikani, Murree, Kuppri, Bhurgi, Khosa, Numriah, Butrani, Lashari, Bubber, Koriah, Nora, Kolachi, Zindipuri, Berohi.

Jhut.—Chacher, Kalru, Kokur, Syal, Pusiah, Thyme, Aric.

Summat.—Summa, Summaja, Dull, Roahma, Umur, Bumbra, Gailra, Pulli, Saita, Rajur, Nukry, Powur, Powhore, Hallapotra, Molla, Diary, Durs, Sukkerdeonpotra, Kotriah, Vikiah, Dadpotra, Koriah, Sungrasi, Thabha, Nori, Senhra, Joga, Jinji, Junaja, Hingorja, Hingora, Bahun, Kullur, Bakur, Durpar.

Hindus.—Brahman, Puskurna, Vias, Ackaraj, Cavata, Josi, Basu, Changangri, Jundria, Prolut, Masara, Dhowra, Lora, Mahdave, Viasurra, Takur, Hirow, Panah, Kullah, Hojah, Saraud, Nuriajur, Sanichurri.

Soda.—Sultan, Bhojraj, Gungdass, Bijara, Sadur, Bhujhur, Kalun, Sungrasi, Virjuid, Bhar-Mull, Askaran, Uda, Bhowta, Gagilra, Sutta, Muddat.

Commercial Tribes, viz. Lohana, Kerar, Uswur, Kutri, Chepa, Sonara, Darzi, Malli, Sutar, Uda, Barber, Rajput, Dohut, Balwara, Kavrio, Charni, Bhatti, Rhye, Dhur, Jessore, Chowan, Jaraja, Purwar, Vurbun, Joga.

Broken Tribes, viz. Mengwar, Bhil, Koli, Balashahi, and Shikari.

Miscellaneous Races, viz. Shaikh, Memon, Kumbrani, Gudda, Bujir, Mohana, Jokiah, Dukur, Koliah, Amunda, Bhopa, Mahur, Hakra.

These multitudinous tribes can be summarized from the 1881 census as follows in the total Sind population of 2,413,823:—

Brahman, . . .	13,531	Shaikh, . . .	32,888
Rajput, . . .	10,534	Sindi, . . .	1,273,761
Lohana, . . .	211,926	Other Muham-	
Other Hindus, . . .	69,088	madans, . . .	119,080
Baluch, . . .	409,012	Aboriginals and	
Pathan, . . .	14,729	forest races, . . .	86,040
Syud, . . .	37,734	Others, . . .	135,500

Most of the races dwelling in Sind designate themselves by tribal names, either assumed by themselves or applied to them. These names indicate the country or town from which they came, or the ancestor or distant race from whom they have sprung.

The tribes are so mixed up one with another, that, excepting just on the borders, no part of the country can be marked off as occupied by any particular tribe; even on the borders there is much intermixture. The great Murree tribe of Baluch, for instance, has a large, and the strongest, part of its clans in the hills to the north, and outside of the Sind border; but there are a great many of the Murrees located in different parts of Sind, even down to 100 miles south of Hyderabad.

The Arab is numerously represented by Syuds, who claim descent from Mahomed, through his daughter Fatima and her husband Ali. There are, of them, 13 tribal designations in Kurachee and 11 in the Hyderabad collectorate,—landowners and extensive cultivators, who say they came from Arabia and Persia about the 12th century. The Hasani and Husaini Syuds (which is properly written Sayyid) are numerous; the former class have the title of Pir, as Pir Bhawan Shah; the Husaini race is termed Sayyid, as Sayyid Jendal Shah. As is usual in the Sind province, these two families are subdivided into

clans, called after their previous place of residence, as Bokhari, Mathari, Shirazi, Lakhirai, Lakrulai, etc. Most of them are of the shiah or rafizi persuasion, and therefore they suffered severely during the various Afghan invasions. Many of these Sayyids are learned men, much respected by the commonality, in spite of the differences of belief. Under the Kalhora dynasty, they became possessed of large landed estates, granted as inam (or free gift) in perpetuity. When the Talpurs came into power, the priesthood declined.

The Koreshi was the Arab tribe to which Mahomed belonged. They have in Sind many tribal names; they are cultivators, kazi, and scribes, originally from Syria, Iran, and Irak, and claim descent from Ali, Abbas, Abubakr, Umar, and Usman, styling themselves Alavi from Ali, Abbasi from Abbas, Sadiqi from Abubakr, Faruqi from Umar, Usmani from Usman.

The Sadiqi are sufficiently numerous, and have the title of Makhdum, or master, as Makhdum Nuh, Sadiqi.

The Faruqi names usually begin with Miyan (master), as Miyan Ibrahim, Faruqi.

The Alavi, the posterity of Ali by any of his numerous wives except Fatima, are all shiahs, are not often met with, and bear the title of Khwajo, e.g. Khwajo Murad Ali.

The Abbassi, descendants of Abbas, are very numerous in Sind. They are called Mullo (priest), or Buzurg (the great), e.g. Buzurg Maaruf, Abbassi.

Other foreign tribes are descendants of Harun, also Mukrani, Ludi (now known as Ludia), Habshi, Sidi, and Jungiani.

The Afghans are generally found about Hyderabad, and in the north of Sind. Many of them have been settled in the country for some generations, and have become possessed of considerable landed property. The Kakar are the most aristocratic of the Afghans.

Gola, formerly slaves, principally from Africa, are the Sidi, Habshi, Khaskeli, Sindi, and Zemghur.

Baluch.—All the tribes who have come from Baluchistan are known in Sind by the general term Baluchi. The Rind tribe is, in Sind, the head of all those from that region, and from them have descended other sub-tribes. The Talpur, however, became rulers in Sind, and the Rind remained their dependents. The Baluch are generally said to have come originally from Aleppo in Syria. They have all the characteristics of Arabs,—sharp, well-defined features, and well-built limbs. In Sind, many of their divisional appellations merely denote families of descendants of men of renown, whose names the families bear. There are 28 tribal names in the Kurachee district, 60 in that of Hyderabad, and 13 in Upper Sind. They are averse to regular labour, and restless, but they will undergo the most wonderful fatigue for the purpose of stealing a camel or bullock. All their traditions point to Syria as their original site, and the date of their advent as about 1200 years ago. Amongst themselves, the Rind rank first in importance, then the Lashari, Jutui, Dumki, Jakrani, Murree, Bugti.

The Brahui have mostly remained in the mountains of Baluchistan. General Merewether says that the Brahui traditions are less clear than those of the Baluch, but are to the effect that they also

came from the west, entering Baluchistan from Kirman by Makran.

Jacobabad, a frontier district of Sind, between lat. 27° 56' and 28° 27' N., and long. 68° to 69° 44' E., which comprises the tract of country bounded by the Bugti Hills on the north, by Kalat on the west, the Bigari canal on the south, and the river Indus on the east. The district ranges from 170 to 257 feet above the sea. From 1865 to 1870 the rainfall ranged from 1·11 to 8·80 inches. At the extreme north is desert plain. The Sind Hollow, a former bed of the Indus, traverses one-third of the district, and between it and the river the country is split up into numerous 'dhund' and 'dhoree.' On its north is a range of barren hills with fertile valleys, occupied by the Murree and the Bugti. Baluch tribes, Jamali, Dumki, Jakrani, Khosa, Mazari, form the population, with Burdi, Sindi, Jumma, the nomade Jat, who rear camels, cattle, sheep, and goats, and Hindu cultivators. The Jat are a hardy, good-looking, industrious race, and their women are very comely; they drink largely of camels' milk. The Baluch use jowari (sorghum) flour, and bajra (*Penicillaria spicata*), and milk. The cultivation is by irrigating canals.

Chanduka is a fertile tract 60 miles long, in Upper Sind, formerly occupied by the Chaudia Baluch. It extends to the desert of Cutchi on the north, has the Hala range for its western boundary, and the river Indus on the east. Its principal town is Larkhana, so called from the Larak, a tribe formerly settled there. The tombs of Shah Muhammad Kalhora and of Shah Baharah are there. Hindus and Muhammadans comprise the population. The Muhammadans are Baluch and Sindi, the latter are agriculturists and artisans. The principal tribes are the Chaudia, the Jamali, the Abra, and the Jat, with the Lahori, the Hukrah, and the Chujrah. The Chaudia and Jamali are poor. The Jat are cultivators, and rear cattle. They are migratory; their subdivisions are the Darudgar, Junejah, Kohawar, Wagon, and others. The settled portion are not called Jat.

The *Sindi* are a quiet, industrious race, tall and handsome, and can undergo much fatigue, but are not very noted for activity. They are nearly all cultivators. They are untruthful, illiterate, and superstitious.

Languages.—The Larayi dialect of Sind is spoken in Chanduka; it differs much from the Sarhaiki spoken north of Larkhana. Persian is the polite language.

The *Kalhara* and Talpur tribes furnished the last dynasties, and though the one deduced its origin from the Abbasides of Persia, and the other advanced pretensions to descent from the prophet, both were alike Baluch.

Yar Muhammad, Kalhora, assisted by the Rind Baluch, overthrew the Puar Rajputs, who held dominion in Sind. He directed that a number of clubs should be suspended in front of his tomb, as a memorial of the ease with which the conquest was effected. The clubs were still hanging in 1847 in front of his tomb at Khodabad.

The *Talpur* have their name from the town (poora) of palms (tal or tar), and are said to amount to one-fourth of the population of Lohri or Little Sind, which misnomer they affixed to the dominion of Hyderabad. There are none of the Talpur in the t'hul. They emigrated from Chot to

Sind about A.D. 1760, and, after attaining power, ruled from A.D. 1799 to 1843, when they were overthrown by the British. The family have four principal branches,—the Shahwani, the Shahadani, the Khanani, and the Munikhani. A minor branch is the Jumilani. The Talpur are of the Shiah sect, and claim to be Syuds.

The Lughari family is a subordinate branch of the Talpur. The Lughari of the Dehra Ghazi Khan plain dwell south of the Khosa, extending from Viddore to Gungehur, between Choti Bala and Hur-rund. The Lughari joined Lieutenant Edwardes' camp in his advance against the dewan Mulraj. The Talpur of Sind was one of their sections. The Lughari claim to be able to trace their pedigree up to their departure from Arabia. They have 55 sub-sections, of whom a large number reside in the hills.

Burgari, a minor tribe of Baluch in Sind, are also connected with the Talpur family.

The *Daoudputra* inhabit generally the country of that name in the north, but are to be met with in various parts of Sind.

The *Desert of Sind* lies between the frontier of Rajputana and the valley of the Indus, and from Daoudputra on the north to Bulari on the Runn, 220 miles long and 80 broad, or 17,600 square miles. It is one entire t'hul, with few villages and a few shepherds; 50 miles without water, the wells 70 to 500 feet deep, and the sand-hills little mountains. It was through this tract that Humayun sought refuge to the Dhat country and its capital, then Omarkot, where Akbar was born. Arora, there, is a ruined town. Omerkot was wrested from the Soda race by the Rahtor tribe of Marwar, and since then the chiefs of the expelled clan have dwelt in Chore, 15 miles N.E. of Omarkot. At one time, every third year brought famine. The Soda women of this desert tract of Dhat are proverbially handsome. In this desert, and in the valley of the Indus, are the Soda, Kat'ha, and Mallani, descendants of the Sogdi, Kat'hi, and Malli, of Gete and Yuti, many of whom call themselves Baluch, or keep the ancient name of Numri, whilst the Zj'hut or Jat retain their primitive appellation. There are also remains of a Johya and Dahya, who, with Gete, Jat, or Hun, hold places amongst the 36 royal races of ancient India. The Baraha and Lohana tribes are there; the Sahrai, the great robber of the desert; the Bhatti, Rahtor, Joda, Chauhan, Mallani, Kaorwa, Joshya, Sultano, Lohana, Arora, Khumra, Sindil, Maisuri, Vishnavi, Jakhur, Shiag, Ashiag, and Puniah. Jakhur, Shiag'h, and Puniah, harmless, industrious, in the desert and the valley, are denominations of the Jat race, but most of these sections have become Muhammadans, and call themselves Zj'hut.

The *Nyad* or proselytes from Rajput or other Hindu tribes are—Zj'hut, Rajur, Umra, Sumra, Mair, Mer, Mor or Mohor, Baluch, Lumria or Luka, Sumaicha, Mangulia, Baggreah, Dahya, Johya, Kairui, Jangurea, Undur, Berowi, Bawuri, Tawuri, Chrendea, Khosa, Sudani, Lohana. These converts are ferocious and intolerant.

The *Soda* is scattered over the desert, some are Muhammadans.

Kaurwa, a peaceable nomade race, chiefly in the t'hul of Dhat, rear cattle.

Dhote or Dhatti, like the Kaurwa, a pastoral race of Dhat; their cows give 8 or 10 seers of milk daily.

Lohana, numerous in Dhat and Talpura; they are scribes and shopkeepers.

Arora, a thrifty race, tradesmen and farmers.

Bhatti, formerly martial, now traders, and, like the *Arora*, have commercial agencies all over India.

Brahman Bishnavi, cultivators and graziers, numerous in Dhat, some in Chore, in Omerkot, Dharnas, and Mitti.

Rebarri, a race who in Hindustan profess Muhammadanism and rear camels; here, are a tribe who rear camels, or, with the *Bhatti*, steal them.

Sahrai is the most numerous of the Muhammadan tribes of the desert, of which he is the terror. *Masson* says the *Sahrai* once ruled in Kalat. They preceded the *Sewah*, a Hindu dynasty, which in turn the *Brahui* displaced.

Khosa, a section of the *Rind* Baluch settled in Upper Sind between Sukker and the Sind canal towards Shikarpur. They have four clans. The *Khosa* become a predatory tribe on the eastern confines of Sind, verging towards the Cutch territories, where *Rajputs* are located. They were very troublesome. They are also in the eastern boundaries as wandering herdsmen.

Sumaicha are converts to Muhammadanism, from the *Soda* race; some are pastoral, some are plunderers. They are dirty, and never shave.

Rajur, converts from the *Bhatti*, are cultivators, shepherds, and thieves, and evil-livers.

Umra and *Samra*, converts from the *Puar* or *Pramara* race, have mixed largely with Muhammadans.

The *Jat*, *Zj'hut*, *Jet*, *Jut*, or *Jhat*, in religion partly Hindu, partly Sikh, and partly Muhammadan, occupy the north-west and bordering provinces of British India, also the Panjab and Sind. They all refer to the west of the Indus and of Ghazni as their original seats. They are the principal cultivating and pastoral classes in Sind.

The *Jat* on the Upper Sind frontier are converts to Muhammadanism; they are a wandering race, but attach themselves to Baluch and other tribes. They are squarer and stouter in their build, and have broader features than the Baluch. In Lower Sind they are camel-breeders and dealers. The *Jat* is as inseparable from the camel throughout Sind as the Arab from his horse in Arabia, and are consulted on every occasion where the health or efficiency of this invaluable animal is in question. The *Jat*, like all the tribes in the Sind districts, have innumerable subdivisions, called *Koum*. They are a hard-working, quiet race, occupying themselves in rearing camels, feeding flocks, or cultivating the soil. They are invariably found in large communities, often living in temporary huts or 'wandas,' and migrating all over Sind and its confines, as shepherds, in search of pasture. Where this is not the case, they are farm-servants either of the Baluch chiefs or wealthy zamindars, who repay their labour with a modicum of the produce. The *Jat* in Sind are exceedingly valuable subjects. Their women throughout the country are noted for their beauty, and, to their credit be it also spoken, for their chastity. They work as hard as the men, and the labour of tending, driving home their flocks, milking the cattle, etc., is fairly divided. They form a large division of the population of Sind, though seldom found in its towns, being dispersed over the whole face of the country, particularly eastward to the

desert tract which separates Sind from Cutch, known as the *Runn*, on which this tribe rear large flocks of camels. Other pastoral Muhammadans are the *Khosa* in Upper Sind, Sikh *Lohana* in the Delta, and emigrants from the Panjab, who have in many instances become amalgamated with the people of the country.

The *Sindi* is taller, more robust, more muscular, and stronger than the native of Western India. His hands, feet, and ankles are large. The features are regular, and the general look of the head is good. His beard, especially among the upper classes, is handsome, though not equal to that of the Persian or Afghan. The brave and hardy hill tribes have always treated the *Sindi* like a serf, and his morale is low. He is idle, immoral, and apathetic, unclean in his person, and addicted to intoxication, notoriously cowardly in times of danger, and proportionately insolent when he has nothing to fear. The *Sindi* women (not the Baluch) are fond of intrigue, fond of flattery, but are grave and sedate in society. The indoor games are *pachisi*, cards, cowries; most all smoke tobacco; they are fond of snuff, and many use *ganja*. The *Sindi* men are fond of fighting (*Ghata*) rams. The best breed is the large and strong black animal of the hills. The women of Sind dress gaily, in bodices worked over with various coloured silks in many patterns, into which they frequently insert pieces of looking-glass. *Sindi* women are of fairer complexion and finer features and form than those of Western India; the latter, however, are superior in grace and delicacy of make. *Sindi* women are most indecent in their language, especially in abuse; they have very few expressions peculiar to their sex, but deliberately select the worst words used by the men.

The *Gahole* clan of Baluch, dwelling in Sind, have marked and peculiar features. Under the Sind Amir's rule they garrisoned hill forts in the western mountains, and held rent-free lands for their military service.

The *Nizamani*, a Baluch tribe in Sind, follow settled pursuits. They take their name from *Nizam*, a common ancestor, though now subdivided into separate clans or houses. They are well educated in Persian, *Sindi*, and Arabic.

The *Kahiri* are a small tribe of peaceful herdsmen and cultivators, occupying lands in the Cutchi district of Sind.

The *Lund* have 30 sub-sections or families.

Amrani, a Baluch tribe on the northern margin of the district between Upper Sind and Cutchi; they have eleven clans.

Jamali, a poor Baluch tribe; cultivators and shepherds at *Rajhan* on the edge of the *Barshari* desert in Upper Sind.

Jatui, a small Baluch tribe in Upper Sind.

The *Mohanna* are deep-sea fishermen and sailors, a thriving class, fish maws and shark fins being largely exported. They also fish with large hand-nets in the *Manchar*, *Maniyar*, and *Kinjur* lakes, resting on an inverted pot as a float. They are Muhammadans, supposed to have been converts from Hinduism. They have four sections,—the *Kurachee*, *Lara*, *Bundri*, *Wungura*, the last named being foresters in the salt-water jungle. They are dark in colour. The men are industrious and hardy, though addicted to the use of *bhanga*. Their women when young are handsome, but even when

married are immoral and unchaste, and use gross language. Their headmen are styled Changa Marsa.

Outcastes.—The ceremonial or professional uncleanness of certain races, which in India takes the form of caste inferiority, is continued into Sind as regards the Dapher, the Kori or weavers, the Dher and Chamar, curriers, tanners, and shoemakers; and the Chahru and Bala Shahi, sweepers. All these are deemed unclean. The Dapher is a hunter, fowler, or shikari; many of them profess Muhammadanism, and are styled Machhi, but are not allowed to enter a mosque, possibly because they eat carrion. They occupy separate hunting grounds, and are skilled hunters. Their name is taken from the 'dapho,' their favourite weapon, a broad-headed javelin, with a shaft six or seven feet long.

The *Langhan* or *Mirasi* and the *Kalwat* are musicians. The *Langhan* are of Jat or Sindi extraction, and are considered a vile race. The *Kalwat* are respectable singers. There are some charming Sindi poems; amongst them is that of *Sasani* and *Punha*, the history of whose love and death much resembles that of *Romeo and Juliet*.

Luri, bards or troubadours, who attach themselves to high Baluch families in Baluchistan and Sind. They are musicians, tinkers, vagabonds, and fortune-tellers. They are in troops, with a chief in each. They profess Muhammadanism, but are really pagans.

The *Agari* is a race of low degree, employed in the manufacture of salt.

The *Rangeli* or *Khobli* is a low courtesan of the Jatki race, from the districts of *Ubbo* and *Jhangsiyal*. They inhabit villages on the main roads, and support themselves and the men by receiving travellers. Some of these women have very fine features and forms, particularly in early youth. A more respectable class is the *Kanyari*, who, like the nautch girl of India, generally unites the occupation of dancing with the immoral part of her profession.

Kalmatti, a well-conducted, intelligent tribe on the western part of the Kurachee collectorate, claim to be of Arab origin. They appear to have established themselves on the Makran coast, whence they pushed their way into Sind, and acquired by conquest possessions on both banks of the Hubb, and in the Sakra taluk. Their chief wealth consists in camels.

The *Muhammadan* religion has been largely accepted by the races who have been occupying Sind, but the numbers professing the Hindu and the Jaina faith are still considerable. Immigration from the Panjab, from Amritsar and Multan, and from the western parts of India, keep up the numbers.

Hindus are dispersed over the whole of Sind; in the wildest fastnesses of the Baluch mountains, in the deserts and smallest collection of huts, in the jungles of the plains, a Hindu and his shop of tobacco, spices, groceries, or cloths, is sure to be found; but their principal localities are in Northern Sind at Shikarpur, and in Southern Sind at the port of Kurachee. In Lower Sind, in the Kurachee collectorate, are Brahmans from the Konkan and Mahratta country, Gujerat and Nuggur; also Gour Brahmans, and the Sursat and the Pokarna from Jeysulmir. In the Hyderabad district, they are even of more distant countries, the Dekhan,

Telingana, Dravida, the Carnatic, and Kanouj. Khatri occur both in Hyderabad and Kurachee. The Vaishnava sectarians seemingly embrace all who engage in traffic and banking. In Kurachee are the Amil, Godi, Kanuga, Mahajan, Merani, and Wanhia; in Hyderabad, the Lohana, Bhatti, Bhabera, Panjabi, Mehisirri, Usuwar, Sehwan, Khalsa, and Shahdadpuri. The Sudra are the Bagoi, Jakhiri, Jeysulmiri, Khutti, Kalal, Kurmi, Lohar, Muchi, Ode, Sochi, Sonara, Sutar, and Thumbuli. The Hindus in Sind, Afghanistan, Arabia, Persia, and Africa, are merchants, bankers, shopkeepers. The Hindu merchants and bankers have agents in the most remote parts of Central Asia, and could negotiate bills upon Kandahar, Kalat, Kabul, Khiva, Herat, Bokhara, or any other of the marts in that region. Shikarpur merchants are found all over India and Central Asia, some as financiers with bills of exchange, others selling cloths. The places of Hindu pilgrimage are Hinglaj, the Makli hills near Tatta, and the Dhara Tirth in the Lukki hills near Sehwan. Women of the Hindus of Sind possess a considerable share of personal beauty, appear to be fond of intrigue, but seldom if ever become prostitutes.

Converts.—Though the older residents in Sind have become Muhammadans, down to modern times Muhammadan converts have been allowed to retain their Hindu names. Under this custom, the Jat Muhammadans have some communities in the northern part of Sind; those in Lower Sind are camel-drivers. The Sumra or Summa Rajputs adopted the Muhammadan religion while ruling, and remained in Sind after their deposition by the Muhammadans. Another section have remained in Cutch, whose chief also takes the title of Jam.

Nareju is one of the oldest of convert Sind tribes, and is found in Lower and Upper Sind or Khyrpur, and became converts to Muhammadanism of the Hanafi Sunni sect. The race is broad, fat, lethargic, and sensual, and the gait heavy and shambling. Sindi is the language that they speak, read, and write.

Ponhar, Muhammadan converts from Hinduism, form one of the most ancient, and formerly most powerful, of the local Sindi tribes, whose influence was destroyed by the Kalora in the beginning of the 18th century. Their present principal residence is at Mehar and Sehwan, in Central Sind.

Abra, an old and influential tribe in Sind, the records of whose prowess and reputation are still preserved in the songs and traditions of the country. They give their name to the Nushira Abra district of Upper Sind. The *Oonur* tribe is an offshoot from the *Abra*; is numerous in the Larkhana and Sukkur districts. Oonurpur is on the right bank of the Indus.

Mhar, a very ancient tribe inhabiting the skirts of the desert south of Bahawalpur. They were converted from Hinduism to Muhammadanism. They are ignorant but peaceable herdsmen, breeding camels and sheep. About A.D. 1541, while Shah Beg Arghum was ruling, they came from Oobana, near the present Bahawalpur frontier, and dispossessed the Jatui. Subsequently, the Daoud-putra dispossessed the Mhar, who never regained their former position.

The *Babra*, a Jaina sect, numerous in Jodh-

pur in Rajputana, are found in Sind. They form part of the mercantile body usually styled Marwari. They are enterprising bankers, financiers, and in Sind merchants, also petty traders and shopkeepers.

Jokia, a tribe in the western part of the Kurachee collectorate, claim a Rajput origin, and their chief takes the title of Jam.

The *Lohana* of Sind are Vaishnava and Saiva Hindus. Some of them worship the river Indus deity and his wazir under the names Jenda Pir and Udhero Lall. They engage in trade and in agriculture. The suffixed titles of their subdivisions are—Mul, Chund, Rae, Ram, Das, Lal. They are the principal number of Hindus in the country, but, like the Saraswati Brahmans, they eat meat, fish, and onions, and drink spirits, buying the flesh from the Muhammadans, it being unlawful for them to kill. They are not highly educated, but in the time of the Talpur Amirs they were largely employed as revenue collectors, and were described as scheming and crafty. Under British rule they have shown an earnest application and devotion to duty, able and energetic, honest and upright. They are financiers, bankers, merchants, and shopkeepers.

Tradesmen are the Raza, Lohar, Wadha or Dakhan, Dhobi, Pinjara, Katri, Khori, Mochi, Sunara, Thattiana, Muhana, Baleshahi, and Machi.

There are, besides, in the Hyderabad district, 78 races of miscellaneous origin.

Religion.—The Muhammadans are 78 per cent. of the population; many of them claim to be Synds; and besides the great sects of Shiah and Sunni, there are several prominent smaller bodies.

The *Ismaili* are chiefly in Sind, where they take the title of Khajjah (Khoja, Khowaja). They are numerous in Bombay city, and in the Sind collectorates of Kurachee, Ahmadabad, Hyderabad, and Tanna. In Bombay city, on the date of the census, 8451, or 6·15 per cent. of the Muhammadans there, returned themselves under that designation, and about 18,000 were residing in other parts of that presidency. They are petty dealers and merchants, are quiet, peaceful people, and have never given any annoyance to the British.

The *Ismaili* acknowledge Ali, Hasan, and Husain as rightful imams; some hold that the line closed with Ismail, son of Jafar Sadiq, who was their seventh and last imam. From him they take the name *Ismaili*, and also from him the 'seveners.' The *Ismaili* put a metaphorical interpretation on the Koran, which tended to explain away and supersede its doctrines, leaving only a negative religion, and substituting licence for morality. They were sometimes called *Mulāhida*, heretics, and have been deemed to include the *Karmatians*, and the *Assassins*, and others, but these are merely offshoots from the *Ismailian* heresy. The doctrines were largely spread by Abdallah, son of Maimun, a native of Persia. In the middle of 1878, Killu Khutu, a young Muhammadan, murdered the Mukhi or headman of the Khojahs in the open street in broad daylight at Umerecurry in Bombay. He was hanged on the 20th July 1878.

The *Bora* or *Bohorah* Dr. Wilson describes as corresponding in many respects with the *Ismaili*, the *Ansari*, the *Mutawilah*, and the *Druse* of Syria. They pay particular regard to the tenets of Ismail, son of Jafar, the sixth imam, and hold, like the Shiah, but in a more exaggerated

form, the mystical doctrine of the union of the deity with Ali. The mercantile *Bora* are divided into three sects,—the *Sulimani*, the *Aliyah*, and the *Dawudiah*, from certain lines of the mullas or pontiffs, to which they adhere. In Bombay city they form 7·8 per cent. of the Muhammadans there; but it is in Kaira, Surat, Broach, Ahmadabad, and other cities of Gujerat, that the sect are principally numerous. They are pedlars, shopkeepers, workers in iron and tin, and many of the men are long absent from their families following their professions. The Bombay census returns show in that presidency about 10,000.

The *Karmati* or *Karamata* is a sect founded about 278 A.H. (891 A.D.) by Ahmad, a follower of Abdallah. He taught that everything desirable was allowable. He endeavoured to carry out his views by violence, and began an open war against the ruling powers. In 290 A.H. (903 A.D.) the *Karmat* sect made a fearful inroad into Syria; and in 311 A.H. (923 A.D.) they plundered Basra and Kufa. In 319 A.H. (931 A.D.), led by Abu Tahir, they took Mecca, with terrible slaughter, plundered the temple, and carried away the Black Stone (*Hajr-ul-Aswad*), which they retained for twenty years. Ar Razi, the twentieth khalif, paid them a subsidy to secure the safe passage of pilgrims to Mecca. The *Fatimite* dynasty of Egypt was founded in 297 A.H. (909-10 A.D.) by an *Ismailian*, in rivalry of the Arabian khalifat. It grew rapidly into power, and became a source of great trouble and jealousy to the rulers of Baghdad, and the wars were most savage and unrelenting. They appear to have pushed eastward into the valley of the Indus, and to have sought a country in Sind about 375 A.H. (985 A.D.), and seem to have been ruling there at the time of Mahmud's return from the fall of Somnath. They destroyed the great idol at Multan, and the chief whom Mahmud of Ghazni drove thence was one of this sect. But they re-obtained power there, for in 571 A.H. (1175 A.D.) Muhammad Ghori again delivered Multan from the hands of the *Karmatians*. In 634 A.H. (1237 A.D.) we find them in some force at Dehli, where they made a concerted assault on the Muhammadans in the great mosque, and slew a considerable number, but they were finally overpowered, 'and every heretic (*mulāhida*) and *Karmatian* was sent to hell.' Their name was given to them from their use of the *Karmata* or *Karnat* style of writing Arabic, in which very small letters are used with very close lines. General Merewether's returns show 39 sections of *Karmati* in the Kurachee collectorate in Sind, but whether or not they belong to the *Karmati* sectarians, there is no information.

The *Assassin* sect known to the Crusaders also sprang from the *Ismaili*. The founder was Hasan-us-Sabah, a native of Re. He was school-fellow and companion of Nizam-ul-Mulk, the well-known wazir of the Saljuki dynasty, and author of *Majma-ul-Wasaya*. The forcible removal of all foes and rivals by the dagger was the distinctive practice of this sect. Nizam-ul-Mulk fell under their daggers, and the author of the *Jahan Kusha* nearly became a victim to them. In 483 A.H. Hasan-us-Sabah obtained possession of the strong fortress of Alamut or Alah-amut (the eagle's nest) in the province of Rudbar, about

eleven parsangs north of Kazwin. Here he and his descendants maintained themselves for nearly two centuries, when the fortress and many others fell to the Mongols. Mangu Khan determined to exterminate the whole of the Ismaili sect; and under him and his successor Hulaku, their fortresses were taken, and many thousands of their men, women, children, and babes at the breast were put to the sword.

The Memon sect of Muhammadans are numerous in the Kurachee and Hyderabad collectorates of Sind, and have spread into all the Bombay districts. The number given in the returns of the census taken in 1872 is about 50,000, but others of the sect must have merely styled themselves Musalman. In Bombay city they numbered 8825. In the returns received from General Merewether there are entered Memon Khojah and Memon Sayata, and are placed among the Shaikh or Memon sections. Dr. Wilson says they take their sectarian name from Mihman, a Persian word for a guest, a stranger, and that they are converts to the Sunni form of the Muhammadan religion, principally from the agricultural and mercantile classes of Hindus in Sind, Cutch, and Kattyawar. In Sind they have many learned and respectable men amongst them, but the bulk are engaged in trade, agriculture, and cattle-breeding.

Slaves.—There was in Sind in the time of the Amirs, a system of slavery common to it and all the countries to the north-west, viz. that of fathers selling their daughters as wives when very young, as also of the sale of girls for the zananas of the wealthy. The Afghans were particularly notorious for this traffic in Sind, but it was after all very limited. Under the former rulers, many slaves were brought from Africa and Arabia, and employed as domestics. They were known as Habshi (pl. Habshish), also Sidi.

The *Guda*, a mixed race between Sindians and Sidi women, were equally slaves with their mothers, and could be bought or sold at will.

Languages.—Sindi is the prevailing vernacular tongue, but the Sindi people and language are more confined to Lower Sind, and there the Sindi has much Arabic mixed with it. It is, however, spoken from the northern boundary of Kattyawar northwards to Bahawalpur, and from the hills on the west to the desert which separates Sind from the western portion of the Indian Peninsula. The Arabic character is used in writing. The language of Lar is purest. Sindi is of Hindi origin, being a still greater variation from the Sanskrit than the Gujarati. It is often written in a peculiar character, called the Khuda Wadi, and the Hindus keep all their own accounts and correspondence in it. This tongue has the dialect of the Siraiiki of Upper Sind, containing numerous Jataki words.

Cutchi has in it elements of the Gujarati. That of the hunters and tanners, Dedh, is another dialect.

The language in use in the Thur and Parkur is called Dati. It is a combination of Sindi, Marwari, and Gujarati. In some parts of the Thur district they carry on business in Gujarati, but the Dati, with which they are more familiar, is in more general use.

Jataki is the language of the wide-spread Jat race, from the northern regions of the Panjab southwards to the Arabian Sea.

The Persian and the Urdu are also to some extent in use.

The few Afghan zamindars settled in the north of the province still use the Pushtu of their forefathers; but the dialect is not sufficiently diffused among the people to be included in the languages of Sind. The same is the case with pure Panjabi; it is confined to the small number of Sikhs who are settled in the different cities and towns.

Baluchi is spoken by the tribes who have migrated to the plains of Sind. One-half of its words appear to be Persian or dialectal variations from that tongue. Like Brahuiki and Pushtu, the Baluchi vocabulary contains a few Sanskrit and Arabic roots, together with a considerable proportion of other words. As must happen among a people divided into clans, and separated from each other, the dialect abounds in diversities of words and idiom, and, being naturally poor, it borrows many vocables from the neighbouring countries. Its literature is confined to a few tales, legends, war songs, and the productions of the Bhat or Baluch bards.—*Sir Henry Elliot's History of India*; *Mr. (Sir George) Campbell's Ethnology of India*; *Census Reports, 1872, 1881*; *Dr. Forbes Watson's People of India*; *Aitcheson's Treaties*; *Tod's Rajasthan*; *Elliot's History of the Panjab*; *Postans' Personal Observations*; *Postans' Sind*; *Masson's Journeys*; *Burton's Scinde*; *Onseley's Travels*; *Hindu Infanticide*; *Pennant's Hindoostan*; *Rennell's Memoir*; *Raicholson, Herod.*; *Smith's Dictionary of the Bible*; *Cunningham's Ancient India*; *Genl. Merewether in Literis.*

PANJAB, a great province in the extreme N.W. of British India, with an area of 142,449 square miles, and a population of 22,712,120 inhabitants. It takes its name, literally the Five Rivers, from five of the great streams which intersect it,—the Sind or Indus, the Jhelum or Hydaspes, the Chenab or Acesines, the Ravi or Hydraotes, and the Gharra or Hyphasis. In many parts the rainfall is scant, and droughts and famines occur. In 1859 there was drought; famines recurred in 1860, 1868, and 1869, severely in the last-named year, and the year 1878 was calamitous. Wheat, their great food grain, has been selling at 25 to 63 lbs. for a rupee.

1862, 55 lbs.	1867, 45 lbs.	1872, 40 lbs.	1877, 42 lbs.
1863, 63 "	1868, 37 "	1873, 43 "	1878, 29 "
1864, 56 "	1869, 28 "	1874, 48 "	1879, 25 "
1865, 46 "	1870, 32 "	1875, 49 "	1880, 29 "
1866, 47 "	1871, 43 "	1876, 55 "	

It is a frontier country in the route of the conquerors who have invaded India,—Aryan and non-Aryan, Scythi and Getae, Turk and Mongol,—who have occupied the plains, and have pushed broken tribes into the mountain and desert tracts. Conquest and occupation have been facilitated by the democratic institutions of the inhabitants, and Alexander, Timur, Baber, Nadir Shah, and Ahmad all entered from the west.

At the time of Alexander's expedition, the Greeks heard of 118 different kingdoms in the N.W. of India, all more or less hostile to each other; and the many martial tribes in and around this province, and the variety of languages spoken within its bounds, attest the accuracy of the Greek historians; also thirty-six native chiefships are still interspersed in British territory.

INDIA, THE PANJAB.

	Area.	Both Sexes.	Males.	Females.
British Territory, . .	106,632	18,850,437	10,210,053	8,640,384
Feudatory States, . .	85,817	3,861,683	2,112,303	1,749,380

The Feudatory States are as under—

	Area. Sq. m.	Popula- tion.		Area. Sq. m.	Popula- tion.
Bhajji,	96	12,106	Kapurthala, . .	620	252,617
Dujana,	114	23,416	Kunhar,	7	3,648
Bilaspur,	448	86,546	Kuthar,	8	1,923
Baghal,	124	20,663	Kumharsein, . .	90	9,515
Baghat,	36	8,339	Loharu,	285	13,754
Bahawalpur,	1500	573,494	Mailog,	48	9,169
Balsan,	51	5,190	Maler Kotla, . .	164	71,051
Bashahr,	3320	64,345	Mangal,	12	1,066
Bija,	4	1,158	Mandi,	1000	147,017
Chamba,	3180	115,773	Nabha,	928	261,824
Dhami,	26	3,322	Nahan,	1077	112,371
Darkoti,	5	590	Nalagarh, . . .	252	53,373
Faridkot,	612	97,134	Pataudi,	48	17,847
Dadbi,	1	170	Rawai,	3	752
Jind,	1232	249,862	Sangri,	16	2,593
Jubbil,	288	19,196	Taihoch,	67	3,216
Kalsia,	178	67,708	Suket,	474	52,484
Keonthal,	116	31,154			

Around the borders, also, are eminently warlike tribes, independent, and kept separate by unending feuds. Every grown-up man is available for their wars, and the numbers of their fighting men have been estimated at 170,200, as follows:—

Akazai,	1,000	Sheorani,	5,000
Husunzai,	1,700	Oshterani,	900
Judun,	2,500	Kasrani,	1,500
Bunerwai,	2,000	Bozdar,	2,700
Swati,	6,000	Khutran,	4,500
Utman Khel,	5,000	Kosah,	4,000
Mohmand,	16,000	Lughni,	3,700
Afridi,	23,500	Gurchani,	1,200
Orakzai,	29,500	Murree,	2,500
Zaimusht Afghans, .	4,500	Bugti,	1,500
Turi,	5,000	Mazari,	2,000
Waziri,	44,000		

Language.—The race distinctions observable there will be understood by the above statements, but the subject may be further illustrated by showing the languages spoken in the province—

Abyssinian,	9	Kashmiri,	49,534
Arabic,	63	Lahouli,	10,303
Bagri,	282,351	Mahrati,	52
Baluchi,	25,748	Nepalese,	2,748
Bengali,	2,591	Panjabi,	14,210,854
Dogri,	212,604	Persian,	6,145
Chinese,	210	Pushtu,	903,818
European tongues, .	27,689	Sindi,	5,126
Garhwali,	1,272,204	Tamil, Telugu, . .	268
Gujari,	17,696	Tibetan (Bhot), .	5,000
Gujerati,	586	Turki,	204
Hindustani,	4,045,903	Miscellaneous, . .	5,405
Jatki,	1,604,760	Unspecified, . . .	7,738
Kanawari (Tibar-skad),	12,209		

Summarizing its inhabitants under their respective religions, the numbers are—

Muhammadans, 11,662,434	Buddhists,	3,251
Hindus,	Parsees,	465
Sikhs,	Jews,	31
Jains,	Others,	1,153
Christians,		

It is the only province of British India in which the Muhammadans preponderate; but the mass of the people are of Jat origin, and have only in comparatively recent years accepted the Islamic faith. The great sects of Muhammadans are as under—

Sunni,	11,306,855	Farazi,	165
Shiah,	102,256	Others,	260,627
Wahabee,	2,531		

Tribes.—The more prominent of Muhammadah tribes belong to three great nations,—the Ghilzai, the Pathan, and the Afghan. The *Ghilzai* tribes, 23 in number, have combined with tribes of Persian origin, but all claim descent from the Pathan progenitor Kais. *Pathans* proper number 23 tribes, comprising Karlauri, who are Indian in the mass (Afridi, Khatak, Waziri, etc), with a large admixture of Turk tribes, also Bangash. The Ghurghushti Pathans claim descent from Ghurghush, son of Kais. Of the *Afghans* proper, 29 tribes are represented in the Panjab. They are recognised to be of Jewish or Arab stock, who have fused into a nation with the Gandhari, an ancient Indian race. They have two divisions, the original Afghans from Ghor, of Jewish or Arab descent or both, with whom are blended the ancient Gandhari immigrants from Peshawur to Kandahar. There are also 14 tribes of the Kakar, a Scythic stock, with affiliated tribes of Indian origin. Baluch claim to have come to their present territory, west of the Indus, from Aleppo. The three nations may be shown as under—

A. Ghilzai Nation.

a. Lodi Section.		Niazai, viz.—	
Lodi,	13,161	Niazai,	36,371
Khasor,	2,099	Kundi,	3,667
		Datanini,	1,363
Lohani, viz.—		b. Ghilzai Section.	
Baluch,	3,749	Ghilzai,	14,166
Daulat Khel,	1,387	Suliman Khel, . .	5,205
Mian,	5,561	Nasir,	9,005
Marwat,	47,546	Kharoti,	7,169

B. Pathan Nation.

Bhitanni,		b. Karlauri Section.	
	3,574	Waziri,	20,743
a. Kakar Section.		Banuchi,	20,307
Shirani,	1,316	Khatak,	118,050
Miani,	2,211	Afridi,	17,426
Babar,	2,431	Utman Khel, . . .	6,924
Oshterani,	1,616	Orakzai,	7,157
Gundapur,	8,095	Bangash,	17,565
Kakar,	4,759		
Musa Khel,	1,998		
Ghorezai,	1,809		
Pauni,	1,211		

C. Afghan Nation.

Muhammadzai,	19,604	Abdali,	9,738
Yusufzai,	38,977	Tarni,	5,812
Utmanzai,	5,517	Zaimusht,	1,335
Mullagori,	1,249	Khutran,	1,558
Mohmand,	44,009	Umar,	3,737
Daudzai,	5,898	Sargani,	3,940
Khali,	13,595		

Several of the independent tribes are barbarous savages. The Census Report of 1881 mentions that 'the true Pathan is perhaps the most barbaric of all the races with which we (the British) are brought into contact in the Panjab.' He is bloodthirsty, cruel, and vindictive in the highest degree; he does not know what truth or faith is.

The border tribes within British territories are largely Pathans, similar in origin and in customs to the independent tribes occupying the mountains and valleys intervening between British and Afghan territory, many of the tribes, indeed, being partly independent, and in part under British rule. Afghan rulers have avoided interfering with these tribes, but they have become somewhat civilised since they have seen the British rule.

The *Syud* Muhammadans are descendants of Mahomed and of Ali. They are distributed through all the province. The Moghul are chiefly in Peshawur and Hazara. Yusufzai, Mohmand,

INDIA, THE PANJAB.

Khalil, and Muhammadzai are almost entirely in the Peshawur district; Khatak are in Bunnu and Kohat; Bangash are almost all in Kohat; Waziri and Lubani are chiefly in Bunnu.

The *Baluch* in the Multan division are said to have arrived in the Panjab about the 16th century. They are strong-built men, with forbidding features, ignorant, rough, and boorish in manners, pugnacious and thieving. They breed camels, grazing them in the jungles of Gugaira near Lahore, selling them in Lahore and the N.W. Provinces. Camels' milk forms one of their chief articles of diet. In 1881, 51 of their tribes were represented in the Panjab, numbering 355,238 souls.

The Jat, Rajput, and allied castes number 6,275,294, as under—

	British	Feudatory	Total
Jat,	3,561,519	868,231	4,429,750
Rajput,	1,136,058	241,511	1,377,569
Thakur,	24,981	7,782	32,766
Rathi,	53,002	32,190	85,192
Rawat,	9,994	7,206	17,200
Dhund,	20,315	...	20,315
Kohat,	9,468	34	9,502

Jat.—There are 81 Jat clans, 26 of them numbering over 10,000; 16 over 20,000; 8 over 50,000; and 3 over 100,000.

Colonel Tod formed the opinion that many of the Jat and Rajput clans are alike of Getic origin; and at the present day we find 31 clans in the Panjab over a million strong, classifying themselves indifferently under the two headings. The Jat race are conspicuous for their industry; their well-fenced and well-worked fields are always distinguishable from the slovenly and ill-cared-for lands of Gujars and Brahmans. The wife of the Jat works cheerfully in the field with him in every kind of agricultural labour.

Broken Tribes.—Dwelling amongst the settled races of the Panjab are nearly three millions of broken tribes, mostly non-Aryans, and whom the settled races deem unclean. Their avocations are scavengers, leather-workers, fowlers, etc. A few of them are regarded as wholly unclean; others are homeless migrants, dwellers in tents, mostly predatory; but all of them possess a kind of monotheism, mixed with shamanist and totemic rites. Many of these remnants have adopted Islam; some have taken the Sikh path; others have adopted the new Ram-dasi faith. Some inter their dead, while others cremate the remains. 2,012,000 are of Hindu origin; 173,000 follow the Sikh faith; 492,000 are Muhammadans, and some are Buddhists.

Minor Dominant Tribes—landowners and agriculturists—

Awan,	532,855	Khanzada,	3,757
Bor,	40,731	Kharral,	18,845
Daoudputra,	18,163	Khattar,	1,245
Dogar,	63,437	Khokar,	36,137
Gakkar,	25,789	Me,	116,227
Gujar,	627,304	Taga,	14,305
Karral,	10,413		

Minor Agricultural and Pastoral Tribes—

Ahir,	173,640	Kanet,	345,775
Arain,	800,041	Lodha,	8,627
Baghban,	81,216	Mahlam,	55,380
Gaddi,	17,422	Mali,	65,716
Ghirath,	160,252	Roya,	1,993
Ghosi,	3,543	Saini,	152,632
Kachhi,	2,258	Sarrara,	4,426
Kamboh,	129,589		

Impure and Outcaste Tribes—

Aheri,	13,086	Julaha,	624,312
Bawaria,	22,024	Kamera,	1,017
Bazigar,	13,841	Kanjar,	2,872
Beldar,	3,449	Kelsal,	1,251
Chamar,	1,072,699	Khatak,	14,181
Chamrang,	5,028	Kori,	10,739
Changar or Chubna,	28,886	Kurni,	4,017
Chuhra or Bhangi,	1,078,739	Mina,	1,116
Dabgar,	1,039	Muchi,	349,272
Dhanak,	66,059	Nat,	11,740
Galaria,	20,500	Od or Odh,	15,627
Gagra,	3,110	Pakhiwara,	4,502
Gandhila,	1,449	Pasi,	1,542
Garri,	685	Perna,	1,157
Harni,	1,338	Purbi,	2,027
Hesi,	1,110	Qalandari,	3,895
Jaiswara,	3,491	Sansi,	21,309
Jhabel,	8,063	Thori,	10,594

Watermen, Boatmen, Cooks, Blacksmiths, Carpenters, Potters—

Bharbhunja,	7,194	Lohar,	311,782
Bhatyara,	11,976	Machi,	168,007
Dhogri,	1,716	Mallah,	67,935
Jhinwar,	433,884	Raj,	11,290
Kamangar,	3,158	Saikhgar,	1,483
Khumra,	1,004	Tarkhan or Barhai,	596,941
Kumhar,	486,025	Thavi,	1,904

Hill Tribes—

Barara,	2,675	Ghai,	1,726
Barwala,	54,758	Hadi,	305
Batwal,	18,784	Koli,	123,171
Dagi,	52,993	Meg,	38,467
Domna,	70,533	Rehar,	814
Dosali,	667	Sarera,	10,813

Foreign Races—

Arab,	2,342	Kazilbash,	441
Ghulam,	3,446	Shaikh,	372,335
Moghul,	102,979	Turk,	3,535

Minor Professional Castes—

Bhand,	2,775	Mirasi,	204,941
Bhat,	30,022	Nal,	342,123
Bhaurupia,	386	Rawal,	17,853
Jogi,	72,733		

Mercantile and Shopkeeping Castes—

Arora; Bhatia; Banya, including the Agarwal, Dasa, Mahesri, Oswal, Saralia; Bohra; Dhun-	sar; Khatri; Mahajan; Pahari; Paracha; Sud; Bhakra; Khaka; Khajah.
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Carriers and Pedlars, Cattle Dealers—

Banjara,	11,217	Maniar,	7,574
Bhabra,	919	Rahbari,	3,881
Kangar,	653	Tamboli,	1,146
Kunjra,	5,001	Untwal,	2,100
Labana,	48,489		

Wandering and Criminal Tribes—registered—

Baluch,	530	Mina,	740
Bawuri,	1,312	Pakhiwara,	1,020
Gurmang,	43	Sansi,	9,563
Harni,	2,721		

Gypsy Tribes—

Baddun,	1,736	Kanjar,	2,872
Bazigar,	13,841	Nat,	11,740
Gandhila,	1,449	Perna,	1,157
Garri,	685	Qalandari,	3,895
Hesi,	1,110		

Scavenger Castes—

Chuhra,	1,078,739	Khatak,	14,181
Dhanuk,	66,059		

Miscellaneous—

Bengali,	1,044	Kanchan,	10,910
Bishnavi,	8,576	Kashmiri,	179,020
Chahzang,	2,624	Kayasth,	13,420
Dogra,	397	Parsee,	462
Gurkha,	1,012		

Sikhs.—The Panjab was the birthplace of the Sikh religion. The chiefs of this creed were dominant when the British fought the battles of Moodkee, 18th December 1845; Ferozeshah, 21st and 22d December 1845; Aliwal, 28th January 1846; Sobraon, 10th February 1846; Kussoor Fort taken, 11th February 1846; Lahore occupied, 20th February 1846; and the Panjab was annexed 30th March 1846.

Nanak, the founder of this faith, was born near Lahore in the latter half of the 15th century, and died at Dehra Nanak on the Ravi in 1539. He taught a form of monotheism, and was followed by other leaders, to whom the title of guru was conceded. A hymn composed by Nanak is recited among other parts of the ritual morning and evening. It is repeated three times in the Granth. Its train of thought resembles the hymn by Milton, sung by Adam and Eve in Book v., *Paradise Lost*. Parts of it run—

'To thee sing th' angels who men's deeds record,
And note and weigh their faith in thee Supreme;
To thee sing regions, orbs, and universe,
Created, cherished, and upheld by thee;
To Thee sing those whose deeds delight the eye,
The hosts that wear the colours of thy faith.
All things beside which sing thy glorious name
Could ne'er be told by Nanak's lowly song.'

In 1676, Guru Govind, the tenth spiritual chief from Nanak, formed the Sikhs into a religious and military commonwealth. In the wars that occurred between them and the Moghuls, there were cruel barbarities on either side; but the destruction of the Delhi empire, and the dissensions amongst the Mahratta leaders, allowed the rise of a Sikh leader, Ranjit Singh, from whose officers the country was conquered.

The *Pedi*, descendants of Nanak, rank first among the followers of this faith. They are well-to-do, but from pride of birth were so notoriously addicted to the crime of infanticide, as to have been designated by the opprobrious title of Korimar, daughter-slayer. They number only 6804 souls.

The Sikh are secular and religious. Of the latter are three classes,—Akali, Nihang, and Nir-malla.

The *Akali* were armed religious devotees of the Sikhs, established by the Guru Govind, and they zealously supported him against the ascetic Banda, the Byragi. In Ranjit Singh's time they moved about almost in a state of nudity, and were very insolent.

No one is a Sikh by descent,—a Sikh must be installed. The institutional discipline of a young Khalsa Sikh is very compendious: when he can bend a bow, wield a sabre, and mount a horse, his instruction is completed.

The followers of Govind, the tenth and last guru, are styled Singh or lion. The followers of Nanak and of his eight successors are known simply as Sikh, but there are several sects,—Udasi, Nanak Shahi, Ganj Bakshi, Ram Rai, Nirmala, Naga, Suthra Shahi, and Govind Singhi. They all believe in the Adi Granth, or first volume compiled by Arjan, but not in the volume compiled by Guru Govind.

All orthodox Sikhs must have the five K's, five accompaniments whose names begin with the letter K,—the kes, or long hair; the kirpan, a small knife with an iron handle, round which the kes is rolled and fastened into the hair of the

head; the kach'h, or drawers; and the kara, an iron bracelet. No part of the person must be shaved, and smoking is prohibited.

The *Daoudputra* are on the left bank of the Sutlej river. In the beginning of the 18th century the Daoudputra were weavers and cultivators, and displayed no martial character, but local convulsions enabled the head of the tribe to assume power at Bahawulpur, and they have since then maintained themselves there. They now claim descent from the Khalif Abbas. They are a tall, strong race, of somewhat dark complexion, but with good features, and wear their hair hanging on their shoulders in masses like the people of Sind and Baluchistan. They have been friendly with the British, and in the battles of the 18th and 28th June 1838, a contingent aided General Cortland and Major (afterwards Sir Herbert) Edwards in the contest with Mulraj, who had revolted at Multan.

Converts.—Of the Rajput converts to Muhammadanism, the Bhatti are chiefly in the Central Division; the Janjua, Siyal, and Gheba are in the Rawal Pindi Division; and Rangar in the Delhi, Hissar, Ambala, and Hazara districts.

Of the other converts to Muhammadanism, the Jat are few in the Peshawur Division. Ghakkar are in Rawal Pindi, Jhelum, and Hazara districts; Dhund, in Rawal Pindi and Hazara; Kharral, chiefly in Montgomery; Karral, in Hazara; Wuttu, chiefly in Sirsa and Montgomery; Meo, chiefly in Gurgaon; Gujar are in all the districts, though mostly in the Chenab, Sutlej, and Hazara; Paracha, in Peshawur and Rawal Pindi; the Khojah, in Amritsar and Rawal Pindi; the Kashmiri are in Amritsar, Lahore, Rawal Pindi, Peshawur, and Hazara.—*Census Reports of 1868, 1871, 1884; Mr. (Sir George) Campbell's Ethnology of India; Dr. Forbes Watson's Tribes of India; Powell's Handbook; Major-General Sir C. M. MacGregor's Frontier.*

NORTH-WEST PROVINCES AND OUDH.—Hindustan, in Europe, is a geographical term applied to British India generally. By the people, however, and by the European residents, the name is restricted to that part of India which lies between the Himalaya and the Vindhya mountains, and the N.W. Provinces and Oudh occupy a large part of that expanse. Hindustan was the Madhya-desa of the ancient Aryans, the middle region or Aryavarta, the Arya country. In a slokam in the Sanskrit work, the *Amarakosha*, the ancient boundaries of it are thus defined:—

'Ariavartah punia bhūmi hi,
Mad'ham Vindhya Himāva yoho.'

i.e. the Aryan country, the sacred land (lies) between the Vindhya and Himalaya, in this way indicating both the dominant race and the boundaries of the country held by them at the time that Amara Sinha wrote.

In 1877 the N.W. Provinces and Oudh were placed within one jurisdiction. The N.W. Provinces lie between lat. 23° 51' 30" and 31° 5' N., and between long. 77° 3' and 84° 43' 36" E., seven degrees of latitude and seven of longitude, its area being 81,403 square miles; while Oudh lies between lat. 25° 34' and 28° 42' N., and long. 79° 44' and 83° 9' E., three degrees of latitude and three of longitude, with an area of 23,992 square miles. They together, including also the

INDIA,—THE NORTH-WEST PROVINCES AND OUDH.

feudatory Rampur State and Native Garhwal, embrace an area of 111,228·9 square miles, and a total population of 44,849,619 souls, of whom over 23 millions are males, and 21½ millions are females.

	Area.	Total Pop.	Males.	Females.
N.W. Prov. & Oudh,	106,108·9	44,107,869	22,912,556	21,195,313
Rampur State,	945	541,914	282,359	259,555
Native Garhwal,	4,180	199,836	102,340	97,496
	111,228·9	44,849,619	23,297,255	21,552,364

Oudh lies between Nepal and the N.W. Provinces. It contains no mountains. In the Gonda district the boundary is on the ridge of the first range of low but abrupt hills of the Himalaya; elsewhere it is in the plains, and is a part of the alluvial valley of the Ganges and of some of its tributaries. The mountainous region of Garhwal has a population of 50 to the square mile. Large tracts of Garhwal, however, are thickly populated, and where the situation is favourable, the cultivation stretches high up the hills, terrace after terrace.

There has been a decrease throughout a large area since 1872. This decrease was due to famine. In the central tract, consisting of the Lucknow Division and Rai Bareli and Sultanpur, the decrease of nearly eight per cent. must be an indication of a real loss. There is a well-defined tract showing a decrease, while another shows an increase. There must consequently have been some condition especially affecting the population of these districts. Such a condition we find in the drought of 1878 and the fever of 1879, from which this central tract suffered especially. That the population of these districts was thus particularly affected, we find from the smaller proportion of children living of the years of birth 1878 and 1879. There can therefore be no doubt that the population of this tract actually has diminished by somewhere about eight per cent., owing to the effects of those two fatal years.

The *languages* spoken are not numerous. It is the great seat of the Hindi and of its offshoot the Urdu or Hindustani, and its other dialects and other tongues have been classed as follows:—

a. Gaurian languages, Indian languages of Sanskrit affinity—

Hindi and Urdu,	43,221,705	Sindi,	72
Garhwali,	340,913	Gujerati,	3,847
Kanoni,	459,623	Mahrati,	3,347
Nepali,	8,723	Bengali,	16,437
Kashmiri,	127	Assamese,	1
Punjabi,	5,805	Uriya,	237
Marwari,	5,664		

44,066,500

b. Tamil, Telugu, Canarese, Malenlam, 1,671

Gondi,	201
Burmese,	8

1,880

c. Arabic, Hebrew, Persian, Baluch, Pushtu,

Chinese, Armenian, Turki, Ladakhi,	
Tibetan,	5,508
Abyssinian,	12
European languages,	33,199

The *religions* professed throughout this province are the Sikh, the Hindu, the Jaina, the Muhammadan, and the Christian, with many cults among the aboriginal races. The fall of Buddhism and the final triumph of Brahmanism was accomplished after long years of sanguinary wars, lasting through generations, perhaps centuries, and the plains of Oudh are supposed to have witnessed the last efforts of Buddhism.

gradually retreating to the Himalayan mountains. They were so devastated by these prolonged contests, that tradition assigns the country lying between the four points of Ayodhya, Kashi, Bithur, and Nimasarang as a solitude. The spirit remains, and Oudh has seen many Hindu reformers.

Ramanand, A.D. 1350, a follower of the doctrines of Ramanuja. His disciples were Kabir, a weaver; Asanand; Rai Das, a Chamar; Sena, a barber; Dhunna, a Jat; Pipa, a Rajput; and the Ramawat poets Sur Das and Tulsi Das.

Kabir, of Oudh, preached about A.D. 1470.

Gorakhuath, also of Oudh, was a contemporary of Kabir, and founded the sect of Kan Phatta Jogi. Birbhan, of Dehli, lived in the 17th century, and in A.D. 1658 founded the Sad'h or Sad'hu, a unitarian or monotheistic sect, with doctrines derived from those of Kabir and Nanak.

Sur Das, a disciple of Ramanand, and native of Oudh, of the time of Akbar (A.D. 1556-1605). He was blind.

Tulsi Das, a follower of Ramanand, died at Benares A.D. 1625. He wrote the Ramayana in Hindi.

Jag Jewun Dus, A.D. 1761, of Oudh, founder of a Sadhnami sect.

Harischandra, founder of a Vaishnava sect amongst the Dom of Oudh.

The devotees and religious mendicants of the N.W. Provinces numbered more than 240,000, and were in twenty-four separate tribes.

The Atithi, Aghori, Brahmachari, Dandi, Jogi, and Paramahansa are Saiva sectarians.

The *Vaishnava* sectarians are Bishnoe, Byragi, Kabirpant'hi, Khaki, and Ramanandi.

Gosain are found in all sects, and Naga and Sanyasi are both of the Vaishnava and Saiva sects.

Hijra, Khaja, Sukhi are servants and attendants in temples, dancing boys.

Khunkhuniya and Kingrihara are Vaishnava musicians.

Kangal and Pankhya are beggars.

Mahant, Malang, and Murchera are superiors of monasteries.

Nanak Shahi, Sadhu, and Sadhnami are monotheists.

Darvesh and Madaria are the Muhammadan sectarians.

Other sects number 57,015.

The *Hindu gods* of the Vedic times, Agni, Indra, Varuna, and others, have been forgotten, as have also the worship of the celestial bodies and the elements. Even the Brahmanical gods, whose worship followed that of Buddha, and known as Brahma, Vishnu, and Siva, are greatly set aside. Brahma is worshipped only at Bithur on the Ganges, and for the others there have been substituted the incarnations of Rama and Krishna, with the lingam symbol for Siva, and the female forms of Lakshmi, Parvati, Durga, Bhawani as the sakti or active energies of their respective gods.

The *Muhammadans* in the province number 5,922,886,—in the N.W. Provinces 4,489,443, and in Oudh 1,433,443. The great bulk, 5,752,056, are of the Sunni sect, only 170,547 being Shiaks, Wahabee 28, and unspecified 255. They have a great reverence for holy men of past ages, and considerable numbers, as darvesh or fakirs, become religious mendicants. Many of these, however, like the Hindu Jogi, adopt this form in

order that they may follow a lazy life. Nearly half of the fakir sects of the N.W. Provinces and Oudh are in Allahabad and Gorakhpur. Badi-ud-Din, styled Shah Madar or Zindah Shah Madar, is said to have been a Jew, born at Aleppo, and to have visited India in the reign of Sultan Ibrahim Sharqi, and resided between Cawnpur and Farrakhabad. He died A.D. 1433, and Ibrahim erected a handsome tomb over him. Muhammadan tradition is that he was born A.D. 1050, and that he is still alive, hence the term Zindah, living. A great fair is held at his tomb for the first 17 days of Jamadi-ul-Awal.

They reverence five pirzadah, viz. Ghazi Mian, a pirzadah who was slain, and is regarded as a martyr; his tomb is at Baraitch in Oudh. Pir Hathili, a pirzadah, was sister's son of Ghazi Mian; monuments have been erected, and fairs are held in his honour. Pir Jalil, a pirzadah of Lucknow. Pir Muhammad, a pirzadah of Jounpur; and another.

The great bulk of the Muhammadans are engaged in humble avocations,—cotton cleaners, weavers, spinners, dairymen, greengrocers, glass bracelet makers, butchers. It is believed that most of these are descendants of converts from Hinduism. This is the ordinary explanation of the numbers of Muhammadans in the different parts of the country; but since the first Muhammadan invasion of Oudh by Syud Salar Masa'ud, a relative of Mahmud of Ghazni, many armies, each with camp followers, have entered it, and each have left remnants behind.

Muhammadans from their first coming into India took a liking to the mild climate and rich soil of Bijpore, and many of them settled in it. Even in later times the jaghirdars were more numerous in Rohilkhand than anywhere else. They were styled Rohi or mountaineers, and gave their name to the district. They made many proselytes.

The chief castes in the two provinces are—

Ahar, cultivators, 257,670
 Ahir, herdsmen, 3,584,185
 Arakh, labourers, 64,713
 Bahelia, fowlers, 67,360
 Banya, Mahajan, trader, banker, 1,204,130
 Banjari, carriers, 41,846
 Ban Manus, rope-makers, . . . 33,213
 Bans phor, bamboo workers, . . . 68,817
 Bari, leaf-plate sellers, . . . 69,188
 Barhai, Kharadi, Kuka, carpenter, 497,207
 Bhangi, Hela, scavenger, . . . 426,243
 Bhar, cultivator, 349,113
 Bhut, Jaga, Jachak, Rajbhat, bard, 129,921
 Bhuinhar, landlord, cultivator, . . . 188,080
 Bhurji, grain-purcher, . . . 301,086
 Bind, toddy-drawer, . . . 72,581
 Boria, cultivator, . . . 21,335
 Brahmins, Ojha, Padha, Pando, 4,655,204
 Chamar, . . . 5,360,548
 Dhanuk, village watchmen, . . . 119,341
 Dhobi, washer-men, . . . 518,872

Dom, basketmaker, singer, dancer, 176,615
 Fakir, mendicant, 225,276
 Ghost, dairymen, 12,475
 Gadaria, shepherd, wool-spinner, 860,220
 Gosain, Hindu devotee, . . . 118,259
 Gujar, landholder, 269,036
 Jat, cultivator, . . . 672,068
 Joshi, astrologer, . . . 33,303
 Kanjar, ropemaker, 19,524
 Kachhi, gardener, agri. labourer, 1,941,663
 Kahar, fisher, water-carrier, 1,222,672
 Kalwar, distiller, 345,365
 Kandu, cultivator, 78,552
 Kayasth, clerk, 513,495
 Khatik, butcher, 152,030
 Khattri, mercantile, . . . 47,288
 Kori, weaver, . . . 813,422
 Kumhar, potter, 633,989
 Kurmi, gardener, cultivator, . . . 2,129,633
 Lodha, landholder, cultivator, . . . 1,000,599
 Lohar, blacksmith, 496,547
 Lonia, saltpetre-maker, . . . 378,619
 Mahabrahman, . . . 1,385
 Mali, gardener, 236,355
 Mallah, boatman, 612,905

Meo, cattle-breeder, 13,246
 Nai, barber, . . . 639,957
 Nat, acrobat, . . . 36,810
 Orb, trader, . . . 18,983
 Pasi, watchman, 1,033,184
 Patwa, tape-weaver, . . . 29,860
 Rajbhar, pigherds, 11,157
 Rajput, land-owner, . . . 3,027,400
 Ronia, trader, . . . 38,105
 Setwar, cultivator, 36,498
 Sonar, goldsmith, 247,485
 Taga, landholder, 101,615

Tamoli, betel-leaf seller, . . . 209,775
 Tharu, cultivator, 27,172
 Teli, oilman, grocer, . . . 685,123
 Others, . . . 1,981,690
 Muhammadans—
 Gujar, . . . 39,858
 Jat, . . . 10,401
 Mewati, . . . 26,666
 Rajput, . . . 122,055
 Taga, . . . 26,070
 225,050

Each of these castes has a history, but the limits of this work preclude notices. The Arakh, Bhar, and Cheru, now small broken tribes in very humble avocations, were dominant even since the Muhammadan times. The Chamar aborigines have largely adopted the Satnami monotheism, and the Taga or Tyagia claim to have been cultivators of the lands before the Jat settled.

The *Gujar*, now a predatory race, once ruled, and gave their name to Gujarat.

The *Kshatriya*, in Oudh, are the chief landholders. About 160 talukdars hold under direct grant from the British Government, and are entitled to seats in the viceregal darbar; and the first 45 or so of these claim the royal Hindu titles of raja, rana, or rao. They follow only arms or agriculture, or serve as semi-military personal retainers, peons, overseers, bailiffs, rent collectors.

The *Khussia* generally call themselves Rajputs. They are the oldest inhabitants of Garhwal, in which district they form half the population. They are peculiar to the hills. Their name is derived from Khuses, the ancient name of Kamaon.

Bisnoi or *Beshnoi*, a sect of Hindu religionists who worship only Vishnu. They were originated about A.D. 1460 in Bikanir, in Marwar, by a reformer named Jhanji. They do not now make any converts, are exclusive as to their food, abstaining from eating food touched by any other sect. Until recently they saluted each other with the Muhammadan greeting, *Us-salam alaikum*, and had such Muhammadan names as Ghulam Muhammad, Faiz Muhammad. They bury their dead.

The *Bisnoi* of Garhwal are turbulent, and disliked by the other inhabitants of the N.W. Provinces. The caste is common in the Moradabad district, where they combine Muhammadan and Hindu customs. They are there a quiet, industrious people, generally carpenters.

Mewati, a predatory tribe of cultivators who seem to have come from somewhere in Rajputana, and are found here and there along the S.W. borders of the N.W. Provinces of India. The Alwar country near Dehli seems of late to have been called Mewat, but they extend farther east than the Gujar, and in Malwa are common as regular soldiers and depredators. They are supposed to be mostly Muhammadans.

Boksa, a forest tribe in Western Rohilkhand, and in part of the forests or Siwalik Hills of Dehra Doon and Terai. They are of short stature and spare habits, with broad faces, depressed noses, prognathous jaws, thick lips, very scanty beard and moustaches, but not darker in colour than the ordinary Hindus of the country. They are reputed to be skilful in witchcraft. They are

very ignorant and indolent, but simple, inoffensive, and good-humoured. They have a scanty, rude cultivation, and collect forest produce and wash for gold, but they have no caste, eat almost anything. They have no separate language. They are supposed to be dying out. They are said to enjoy a wonderful immunity from the effects of malaria.

In the Terai they claim to be Powar Rajputs, and claim to be addressed as Thakur. They seem to have come from Dharanuggur about the 11th century. Tharu or Tarooa state they came from Chitore, after its third sack, that by Akbar about A.D. 1560. They rear fowls.

The Boksa and Tharu are alike superstitious, truthful, addicted to drink, not very chaste. Both are to an extent migratory, exhausting the land, and moving to fresh soil. They frequently consult their medicine men, who are called Barara.

The *Gaharwar* and *Dungra* are other occupants of the Terai.

Atith, Saiva sectarians, followers of the doctrinal teachings of Sankaracharya (A.D. 850). He had ten disciples, each of whom founded a house, and are known as the *Dasnami*; 6½ houses have since dissented (*atitha*, passed away from worldly cares); the remaining 3½, known as the *Dandi*, because they carry a staff, adhere to Sankara's views.

The *vagrant*, mendicant, and predatory races are the *badhak*, *bawari*, *bhand*, *bhantu*, *bharthi*, *bhat*, *bhaupia*, *birjbasi*, *dalera*, *gandhila*, *gujar*, *kaparia*, *bhangar*, *nat*, *natak*, *sunoria*.

The *forest* and *hill* tribes and *fowlers* are the *bahelia*, *bandi*, *bhotia*, *boksa*, *chuyar*, *dhanuk* or *dosadh* or *darker*, *dom*, *dungra*, *gaharwar*, *khunjar*, *passiah*, *raji* or *rawut*, and *sansia*.

The *religious* mendicants are the *aghora*, *atith*, *bisnoi*, *fakir*, *gosain*, *joghi*, *paramahansa*, *sanyasi*, and *satanami*.

Infanticide of female children has been a crime amongst several of the races of the south and east of Asia from prehistoric times. Muhammad denounced it among the Arabs; and in the 19th century, in India, the British have striven to put it down. It has been practised by the Bedi amongst the Sikhs, by Rajput races of Rajputana, by the Jharajah Rajputs of Cutch, by the Toda mountaineers of the Nilgherries, but notoriously to a large extent by Rajput tribes in the N.W. Provinces and Oudh, and the Government of India published Act viii. of 1870 for its suppression. In this Act, certain tribes, chiefly Rajputs, were proclaimed. The total number of persons belonging to castes suspected of the practice is 7,247,503, but the average number 'proclaimed' amounts only to 357,419. These latter have been carefully watched for the last five years, and a census taken annually. The present percentage of females is 39·3, and of males 60·7, while the general return for the whole population shows 48 per cent. of females. The present census shows an increase in the proportion of females, but this is due, Mr. White says, to the superior accuracy of the present report, and not to the suppression of the practice of female infanticide. There is little beyond surmise known as to the laws regulating the production of the sexes; but it has been suggested (Report, p. 45) that in the N.W. Provinces and Oudh more boys are begotten than

girls, and the following are the births registered among the proclaimed castes:—

	Male.	Female.	Total.
1875, . . .	8,701	7,914	16,615
1876, . . .	8,993	8,539	17,532
1877, . . .	8,722	8,304	17,026
1878, . . .	5,838	5,501	11,342
1879, . . .	7,830	7,295	15,125

Also, the 1881 census report gives the males and females of 193 castes in the N.W. Provinces and Oudh, 161 of whom had more males than females.

It is not solely among the proclaimed castes of this province that females are fewer than the males; all the races and sects have fewer women:—

Races.	Male.	Female.	Total.
Hindus, . . .	19,813,098	18,210,296	38,023,394
Jains, . . .	42,819	37,138	79,957
Sikhs, . . .	2,776	868	3,644
Buddhists, . . .	61	42	103
Brahmas, . . .	4	2	6
	19,858,758	18,278,346	38,137,104
Muhammadans, . . .	3,022,445	2,900,441	5,922,886
Christians, . . .	31,208	16,456	47,664
Jews, . . .	57	44	101
Parsees, . . .	88	26	114
	3,053,798	2,916,967	5,970,765
Grand total, . . .	22,912,556	21,195,343	44,107,869

It is only in the Madras Presidency and Bengal Province that the females exceed the males. Ratio per 1000 to total population:—

	Males.	Females.		Males.	Females.
Madras, . . .	495	505	Central Pro-	505	495
N.W. Pro-			vinces, . . .	498	502
vinces, . . .	519·5	480·5	Bengal, . . .	542·5	457·5
Berar, . . .	516·5	483·5	Panjab, . . .	508	492
Bombay, . . .	516	484	Hyderabad, . . .		
Burma, . . .	533	467	England and		
Coorg, . . .	563	437	Wales, . . .		
Assam, . . .	513	487	1881, . . .	486	514

The census report (p. 35, par. 46) puts forth the opinion that the increase in the proportion of females at the 1881 census is not due to the decrease of female infanticide, and this seems a legitimate deduction from the following details:—

Under ten years old.

	Males.	Females.	Percentage of Females.
Suspected clans, . . .	946,591	833,565	46·8
Rest of population, . . .	4,929,176	4,699,254	48·8
Total population, . . .	5,875,767	5,532,819	48·4

Above ten years old.

	Males.	Females.	Percentage of Females.
Suspected clans, . . .	3,004,682	2,512,665	45·5
Rest of population, . . .	14,032,107	13,149,829	48·4
Total population, . . .	17,036,789	15,662,494	47·9

In the 1872 census, it is supposed that there had been a large concealment of girls under twenty years of age. In 1872, the girls under ten were 4,135,097, and in 1881 they numbered 4,094,684, a decrease of 40,469.

In the feudatory province of Garhwal, the males are returned as 170,755, and the females 174,874.

RAJPUTANA, a region to the west of Hindustan, is chiefly ruled by feudatory princes, mostly of Rajput descent. These have twenty states, with an area of 129,750 square miles, and a population of 10,102,049. The British portion, consisting of Ajmir and Merwara, has an area of

2710 square miles, and a population of 460,722, the totals being in area 132,460 square miles, and population 10,729,114, or 80·9 to the square mile. The country is little productive; one part of it, indeed, Marwar, embracing the Indian desert, takes its name from Mri, death; and the people mostly consist of races who have been driven from the more open plains, and found shelter in this inhospitable region.

Rajputana lies in the centre of a circuit all round the edge of the more compact mass of the Jat people,—from the Salt Range, through the Northern Panjab and adjoining hills, to Rohilkhand, Oudh, and the Centre Doab, thence by Bundelkhand, through Sindia's territory, Malwa, Mewar, Gujerat, and Kattyawar, into Lower Sind. They are not found in any number to the north of the Salt Range, nor are they in any of the hill country west of the Jhelum. A large proportion of the Rajputs scattered about the Eastern Panjab, Cis-Sutlej territory, and Dehli districts, are now Muhammadans, as are occasional Rajput villages all over Hindustan, and a good many Rajput rajas, their conversion having been influenced by the Moghul emperors. But east of Dehli, conversion is quite the exception. A small Rajput tribe, called Jan-jua, now Muhammadans, is, however, found about the Salt Range.

The North-Eastern Panjab and Cis-Sutlej districts seem to have first been a Brahman, then a Rajput country, and subsequently advanced upon by the Jat. The Jat country is just such as would be occupied by a large stream of people issuing through the Bolan pass, in lat. 28° or 30° N., and the Rajputs are ranged in a semicircular form around the eastern and northern and south edge of the Jat area, the mass of them occupying the richer valley of the Ganges. Mr. Campbell's conjecture is that the Rajput are an earlier wave from the same source as the Jat, who came in by the same route, have advanced farther, and been completely Hinduized; while the Jat have come in behind them.

From Mahmud to Aurangzeb, the Indian conquerors were contented with the nominal subjection of the hardy Rajput tribes of Rajputana, among whom military enthusiasm, grafted on religious principles, was added to strength and agility of body. Sir John Malcolm, writing of them, remarks that it was not easy to subdue Rajputs. Such men, though broken by their own dissensions, before and after the Muhammadan conquest, into a thousand petty states, almost every one of which was an object of contest between brothers, yet still every individual was a soldier who preferred death to disgrace, and though ready to be the servant, scorned to be the slave of any monarch upon earth.

Akbar allied himself with the Rajput royal houses, and for a hundred years, high civil and military posts were bestowed on them. The most brilliant conquests of Akbar, Jahangir, and Aurangzeb were by their Rajput allies. But the Rajputs were alienated from the Moghul family by the bigoted conduct of the emperor Aurangzeb, who reimposed the poll tax on Hindus which Akbar had abolished, and by his destroying Hindu temples everywhere. Aurangzeb alienated the sympathies of a race who, when rightly managed, had encountered at command the Afghan amidst the snows of Caucasus, and made the

furthest Chersonese tributary to the empire of Assam. Raja Maun of Jeypore took Arakan, Orissa, and Assam. Raja Jeswunt Singh of Marwar retook Kabul for Aurangzeb, and was rewarded by poison. Raja Ram Singh Hara of Kotah made several important conquests, and his grandson Raja Eswari Singh and his five brothers were left on one field of battle.

The love of country and the passion for possessing land are strong throughout Rajputana. While there is a hope of existence, the cultivator clings to the bapota; and in Harauti this amor patriæ is so invincible, that, to use their homely phrase, 'he would rather fill his part in slavery there, than live in luxury abroad.' There are, however, amongst the Rajputs 84 mercantile tribes.

Rajputs have been little prominent since the early part of the 18th century. Besides the continuous strivings amongst their own tribes, following the crushing defeat of Prithi-raj, A.D. 1193, by Shahab-ud-Din, for several hundred years they had to sustain the shocks given by the Muhammadan invaders. On the decline of the house of Timur, they became the dupe and then the prey of the Mahrattas, and they were only saved from utter annihilation by becoming the loyal allies of Great Britain. The armies they furnished had exhausted the material, infanticide has diminished their numbers, and their wives, shut up like those of Muhammadans, give no aid in agriculture. Misfortune and compulsory inaction has led to the excessive use of opium, and the 19th century has heard nothing of the independent chiefs of this once warrior race.

Of late years, Rajputs, as they have become under Brahmanical influence, have more and more strictly been denying themselves animal food and the flesh of the wild boar, and the greatest number are vegetarians, subsisting upon farinaceous food, with vegetables, pulse, ghi, butter, and milk.

The names of the states are Ajmir, Banswara, Bhurtpur, Bikanir, Bundi, Dholpur, Dungarpur, Jeypore, Jeysummir, Jhallawar, Jodhpur, Kerrowlee, Kishengarh, Kotah, Lawa, Merwara, Oodeypur, Partabgarh, Shahpura, Sirohi, Tonk, and Ulwar. Ajmir and Merwara are British territory, Bhurtpur and Dholpur are ruled by Jat princes, and Tonk by a Muhammadan chief, the other seventeen states being under Rajput sovereigns. But Rajputs nowhere form a majority of the population, though they are strongest numerically in the northern states and in Mewar.

At the census of 1881, the religions of the people were found to be—

Hindus,	8,839,243	Sikhs,	9
Muhammadans,	861,747	Parsees,	7
Christians,	1,294	Others,	21,077
Jains,	378,672		

And the castes were found to be—

Brahman,	906,463	Chamar,	567,088
Rajput,	479,554	Dhakar,	75,008
Mahajan,	634,440	Sondhia,	43,740
Kayasth,	19,118	Balal,	61,530
Gujar,	402,709	Other Hindus,	3,344,167
Jat,	428,598	Sikh,	9
Ahir,	130,653	Parsee,	7
Mina,	427,672	Muhammadan,	861,747
Bhil,	105,870	Meo,	45,946

The Khanzadah, in Ulwar (Alwar) and North Jeypore; the Kaimkhani in the same neighbourhood; the Meo, who are an indigenous tribe,

very strong in Ulwar and Bhurtpur; the Merat section of the Mairs in Mairwara; the Sodhas of Rajput descent, in the far west, towards the borders of Upper Sind, have adopted Muhammadanism, but continue to regulate their marriages by their own rules of genealogy and consanguinity.

The *Baori* and *Moghya* are predatory tribes, the former north of the Aravalli, and the latter south of that range. They are professional thieves.

The *Bhat* or *Bards* are a prominent race, the genealogists of the Rajput races.

Jaina are of Rajput descent, though now financiers and merchants. The *Gujar*, *Jat*, *Mina*, and *Mair* are the principal agriculturists.

Rajputs have spread into every part of British India, but wherever found they claim to belong to certain tribes and clans, and, like the people of Europe and the Mahrattas of the Dekhan, they have also surnames, though the families are too extended for these names to be utilized.

Rajputs claim to have three origins,—(1) the descendants of the *Suryavansa* or *Solar* race, the ancient dynasty of the *Sun*; (2) the descendants of the *Chandravansa* or *Indravansa* or *Lunar* race, the ancient dynasty of the *Moon*; and (3) the *Agnicula*, the family initiated at a sacred fire said to have been kindled on Mount Abu by the saint *Agastya*. From these three, thirty-six primary royal races are said to have sprung, of whom the following may be enumerated:—

- A. 36 Solar or Suryavansa dynasties.
 1. *Grahlot* or *Gehlot*, 24 branches. The *Sesodia* is the most distinguished. The rana of *Udaipur* is a *Grahlote*.
 2. *Rahtor*, descended from *Rama* by *Kusa*, his second son, 24 branches. The raja of *Jodhpur* or *Murwar* belongs to this tribe.
 3. *Kachwaha*, also sprung from *Kusa*, 12 branches. The raja of *Jeypore* is of this tribe.
- B. *Yadu* or *Chandravansa* or *Jadu* or *Lunar* dynasty, sprung from the moon.
 1. *Yadu* or *Jadu*, descendants of *Krishna*, 8 branches. The *Jharija* and *Bhattya* in *Cutch* and *Jeysulmir* are the most powerful.
 2. *Tuar*. *Vikramaditya* was a *Tuar*.
- C. *Agnicula* or *Fire* race have four tribes and 87 branches, viz.—
 1. *Pramara*, west of *Malwa* and the desert of the *Indus*, 35 branches. The *Mori*, *Soda*, *Sankla*, *Khair*, *Umr*, *Sumra* (now *Muhammadas*), *Vehil*, *Mairawat*, *Balhar*, *Kaba*, *Omata*, *Rebar*, *Dhundia*, *Sortla*, *Harir* little known.
 2. *Parihara*, 12 branches.
 3. *Chalukya*, of great power in the 11th, 12th, and 13th centuries, 16 branches. The *Bhagel* branch is their chief representative.
 4. *Chauhan* or *Chaumana*, 24 branches. The *Hara* of *Harawti*, the *rajas* of *Kotah*, *Bundi*, the *Khichi* of *Ragughar*, the *Deora* of *Sirohi*, the *Sonagarba* of *Jhalore* and *Pawaicha* of *Pawaigar*.

The unnamed progenitors of the four *Agnicula* tribes of Rajputs—the *Chauhan*, *Chalukya*, or *Solunkee*, *Puar* or *Pramara*, and the *Parihara*—seem to have been invaders who sided with the *Brahmans* in their warfares, partly with the old *Khatris*, partly with increasing schismatics, and partly with invading *Græco-Bactrians*, and whose warlike merit, as well as timely aid and subsequent conformity, got them enrolled as 'Fire-born,' in contradistinction to the *Solar* and *Lunar* families. The *Agnicula* are now mainly found in the tract of country extending from *Ujjain* to *Rewah* near *Benares*, and *Mount Abu* is asserted to be the place of their miraculous birth or appearance.

Colonel *Tod* was inclined to regard the *Agnicula* race as of *Scythic* origin, but Mr. *Elphinstone* (p. 229) points to the difference in their physical appearance and habits from the *Rajputs*.

The seat of the *Pramara* or *Puar* was amongst the *Vindhya*, at *Ujjain*, *Dhar*, and *Mandu*. *Vikramaditya*, the champion of *Brahmanism*, was, according to common accounts, a *Puar* Rajput.

There are several races in *Rajputana* on whom the surrounding civilisation has made no apparent impression.

The *Bhil*, an aboriginal race, are entered as numbering 105,870. They are in clans under chiefs, inhabiting long stretches of wild and hilly tracts, where they live almost independent, holding together under their own petty chiefs and headmen, paying irregular tribute or rents to the chief of the state, or to the Rajput landowner upon whose estate they may be settled. There are also, of course, a good number of *Bhils*, as of all other half-tamed tribes, who have mixed with the general population. At the 1881 census they rose in rebellion on the attempt to number them; but their numbers have been supposed to be, in *Udaipur*, 51,076; *Partabgarh*, 270; *Dungarpur*, 66,952; *Banswara*, 48,045.

The *Dadu Panthi* sect, who have their headquarters in *Jeypore*, have the armed *Naga* as one of their sections; the *Ram Sin'h* sect prevails in *Ulwar* and *Mewar*, and have their headquarters at *Shahpura*.

Mair have been supposed to have at one time dwelt in the Upper *Panjab* and in the *Indus* valley, and they have been conjectured to be a relic of the *Med*, an Indo-Scythic tribe that crossed into India from Central Asia.

Mewat.—The fierce and turbulent mountaineers of *Mewat*, though their frontier was within 25 miles of *Dehli*, were never entirely quieted until the establishment of the British Government.

The *Parihara Mina* until recently carried out the destruction of their female infants. They traced the practice to an injunction of a woman who became a *sati*, also to a curse of *Mahadeva*. To be a father-in-law is to ensure contempt, and he is looked upon by the bridegroom as an inferior. Their daughters are, however, eagerly sought after by the other tribes of *Mina*. They worship *Siva* as *Mahadeo*, whom they usually designate *Baba Adam*, father *Adam*. The *Mina* are undoubtedly aborigines.

One of the *Mina* race puts the *tika* of investiture on the forehead of the Rajput raja of *Nerwar*. It is of blood drawn from the face of another *Mina*.

• The *tika* of investiture put on the forehead of the rana of *Udaipur* is of the blood of a *Bhil*.

The Hinduized chiefs of Central India have the *tika* of investiture of the blood of a pure *Kol*; and the head of the *Cheri*, formerly a great tribe, but now a few families, is invested with the blood *tika* of the non-Aryans and the title of *raja*.

Rajput women, even more so than the *Musalmani*, are kept strictly concealed, termed *gosha* or *pardah nashin*, rarely appearing abroad, and even then, on the necessity occurring, carefully veiled. A woman exposing her face is understood to proclaim herself immoral. They are, as a rule, entirely uneducated; but occasionally a queen or the wife of a *Thakur* may have a smattering of *Hindi*. Many of them drink spirituous liquors, and most of them indulge freely in tobacco and

opium, the latter drug being given even to infants. They possess great influence over their husbands, and evince the deepest interest in all that redounds to their husband's name and fame. Family pride with them appears the chief motive of every action, and they are at all times ready to brave danger, even to sacrifice their lives, in support of it. This spirit has on occasions led to their affording examples of daring which have placed them as high in the songs of the bards as their fathers and husbands, but at others has led them into long-continued family quarrels, the wives being in constant dispute with each other.

Their daughters are married to men of the best tribes, and their widows are not permitted to remarry; and it is the point of honour as to their daughters' marriages, that led to the practice of infanticide. Their practice is not to marry into their own but into another tribe, and this has assimilated the tribes to each other. A marriage ceremony is not considered completed until 'teag' or distribution of presents to charuns and bards has been made, which formerly were disgracefully high.

The Rajputs were long notorious for encouraging their widows to immolate themselves as sati, with the dead bodies of their husbands, and there are many chattri or domed cenotaphs erected, where chiefs or men of mark have been burnt after death, often with their wives and female slaves.

Several of the tribes were notoriously guilty of destroying their female infants, and this criminal tendency has not, it is supposed, been eradicated. At the 1881 census, in every one of the twenty-two States the males are in excess of the females, the totals of their numbers being 5,710,337 males and 4,852,434 females.

Rajputs are little advanced in high education, though the celebrated astronomer Jye Singh earned a European fame.

Some of the tribes follow the Scythic custom of adopting the names of animals as the titular appellations of the clans. The Sesodia have their designations from Sissu, the hare; the Lumri are the fox; the Kachwaha, the tortoise; the Gurgbansi and the Langa are the wolves.

The better known of the tribes and clans are—

Agarwal.	Dahuna.	Kaim-khani.	Rajwar.
Agnicula.	Dhakara.	Kamara.	Rangar.
Bach.	Dhundia.	Katti.	Rebar.
Baghel.	Doba.	Khair.	Sadhani.
Baihar.	Dogra.	Khanzada.	Sama.
Bais.	Gaddhi.	Khatiri.	Sankla.
Bhali.	Gaurua.	Langa.	Sengar.
Sultan.	Gerhwal.	Lumri.	Sesodia.
Bhat.	Gohil.	Macheri.	Sikerwal.
Bhatti.	Gor.	Maldot.	Sirni.
Bhayel.	Grahilot.	Meo.	Sirwaya.
Bilkhuria.	Guhurwar.	Mer.	Sodha.
Bir-gujar.	Gurgbansi.	Mina.	Solunki.
Bujgoti.	Harn.	Mohil.	Sorila.
Bundela.	Harir.	Nikumba.	Sundhia.
Bundi.	Hun.	Oomat.	Sumra.
Chahil.	Jat.	Oswal.	Tak.
Chandela.	Jetwa.	Parihar.	Thaori.
Charan.	Jhala-Muk-	Pramara.	Tilak.
Chauhan.	wahana.	Puar.	Chandra.
Chauhanar.	Jharija.	Rahtor.	Tuar.
Choura.	Johya.	Rajbansi.	Umra.
Dabi.	Kaba.	Rajkumar.	Vehil.
Dahiria.	Kachwaha.	Rajput.	Yadu.

The Ajmir and Merwara provinces are under British jurisdiction, although parts of Merwara belong to the Marwar State and part to that of

Mewar. The area is 2710·68 square miles, and the population 460,722, of which number 57,309 persons are in British Merwara, 5611 are in Marwar Merwara, and 38,514 in Mewar Merwara. Mer means a hill, and the saying is,—Mer aor mohr, unché pür razi hain,—Mer and peafowl love the heights.

Ajmir city in 1881 had a population of 48,735 souls. In Ajmir villages three or four families live together in one house. In towns, particularly in Ajmir city, families differing from each other in caste and connection are seen living in separate compartments in the same enclosure, and three or four strangers take a house jointly.

Jain.—The principal mercantile tribes are the Agarwala, Bija Bargi, Khandelval, Mahesri, Oswal, and Saraogi, in all 39,641 in number. The head priests or Sri Paj of the Saraogi Digambara Jains are celibates, and are greatly revered. The Swetambara head priests are the Jati. They carry a stick, dress in white or yellow, some of them marry.

The Jati of the Dhundia, a sect of the Oswal tribe, are ascetics, both male and female. They seldom wash their bodies, do not shave the head, and keep their mouth covered with a cloth to prevent incurring the sin of swallowing minute insects. The Tera-panthi are a like sect among the Saraogi. Both sects abhor the killing of animals.

The Digambara neither eat nor drink when the sun is below the horizon. The Swetambara are less strict.

The aboriginal castes and tribes are as under :

	Ajmir.	Merwara.	Total.
Mer,	15,764	17,182	32,946
Merat Gorat,	377	7,334	7,711
Barar Rawat,	1,636	18,406	20,036
Bhil,	4,760	1,789	6,549
Mina,	4,389	35	4,424
Chita,	86	46	132
Total,	27,012	44,786	71,798

The Chita and Barar, according to tradition (Tod, i. p. 680), are descended from Jodh Lakhun, son of Prithi-raj, and a Mina girl who had been seized in a marauding expedition, whom he married, supposing her to be a Rajputni. Discovering her race, he sent her away, and her two sons, Ahul and Anup. One day, while resting beneath a banyan tree (bār), the brothers prayed that, as a sign, if their race was to continue, the trunk might rend asunder, and the event is handed down in a distich—

‘Charar se Chita bhayo, nor Barar bhayo bār ghat,
Shakh ek sé do bhayé; jagat bakhāni jāt.’

‘From the rending noise, the Chita are called, and the clan Barar from the splitting of the bar tree. Both are descended from one stock; the world has made this tribe famous.’

CENTRAL INDIA is occupied by 69 Native States or semi-independent holdings. The rulers of Bhopal and Jaora are of the Muhammadan faith, the other chiefs profess some form of Hinduism. These states are spread through two irregular and detached tracts stretching from west to east across the middle of the continent of India. A straight line drawn from Nemuch, in long. 74° 54' 15" E., to the capital of the Bhopal State, in long. 77° 25' 56", would pass through portions of Gwalior, Jaora, Gwalior, Jhallawar

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(Rajputana), Gwalior, Dewas, Narsingarh, Rajgarh, Gwalior, to Bhopal. These Native States are in political relation with the Government of British India, conducted by an agent to the Governor-General for Central India and his assistants.

The total area of Central India is 75,229·64 square miles, with a population of 9,261,907 souls, or 123·12 persons per square mile. 94 per cent. profess some form of Hinduism, 5 per cent. Muhammadanism, and Jain, Parsee, Christians, Sikhs, and Jews form the other 1 per cent.

Hindus,	7,800,396	Sikhs,	1,455
Muhammadans,	510,718	Aborigines,	891,424
Jains,	49,824	Jews,	38
Parsee,	916	Unspecified,	71
Christians,	7,065		

The population can best be shown in detail by arranging them as Hindus and Aborigines—

A. Hindus, viz.—

	Males.	Females.	Total.
Brahman,	515,385	446,608	961,993
Rajput,	436,349	367,017	803,366
Ahur,	129,161	117,215	246,376
Balal,	86,447	83,945	170,392
Banya,	152,553	134,125	286,678
Channar,	566,038	510,911	1,076,949
Gujar,	183,884	153,582	337,466
Kach'hi,	93,671	89,393	183,064
Kunbi,	86,286	81,862	168,148
Teli,	132,617	117,635	250,252
Others,	1,747,627	1,568,085	3,315,712

B. Aborigines, viz.—

	Males.	Females.	Total.
Bhil,	111,256	105,766	217,022
Gond,	209,066	204,536	413,602
Mohia,	2,665	2,426	5,091
Mang,	739	770	1,509
Mhar,	1,194	1,194	2,388
Mina,	26,562	23,273	49,835
Kol,	91,646	95,669	187,315
Deswuli,	7,823	6,839	14,662

Total Aborigines, 450,951 440,473 891,424

Grand total, 4,882,823 4,379,084 9,261,907

The proportions thus being 87·23 females to 100 males.

The race descent is various in the nations, even in the chiefs. The rulers of Rewa, Sohawal, and Koti are Baghel. Bundela princes rule in Ajai-garh, Bijawar, Charkhari, Dattia, Panna, and Urch'ha, and other less important though powerful families in Bundelkhand are Bundela. The maharaja of Urch'ha is the acknowledged head of the Bundela tribe.

The chiefs of Rutlam, Sailana, and Sitamau are Rahtor Rajputs, and have a common ancestry, claiming descent from the Jodhpur family. Khichi and Umat Rajputs are in the west from Bundelkhand, and there are small scattered numbers of Parihar, Kachwaha, and Sesodia Rajputs, with Puar Rajputs, in Dhar and Dewas.

Rewa, with an area of about 10,000 square miles, has no roads or means of internal communication.

The *Jaina*, 49,824 in number, are a wealthy commercial people, dwelling in towns, and exercising much influence over their fellow-townsmen in all matters bearing on the sanctity of animal life. Instances have occurred of their depriving a whole community not only of animal food, but also of clean clothes, during periods sacred to their special faith. They admit of proselytes from the higher Hindu castes.

The *Chamar* are deemed unclean; to touch them is pollution, and they are rarely allowed to reside within the village.

Baghelkhand and Bundelkhand in the eastern parts of the region include in their population a considerable number of Gond, Kol, and semi-independent Baghel.

The *Bhils* in Central India are in the S.W. corner of the Agency.

Kol of Central India occupy the hilly country of Chutia Nagpur, Mirzapur, Rewa, and Panna. Kol wives eat with their husbands; the Kol are passionately fond of dancing, which they cultivate as an accomplishment. They have a peculiar dread of witches, and are very superstitious. The custom of marrying by capture is current amongst them. The young man waylays the girl he has selected to carry off, and brings her to his house. Her relations soon appear, but are satisfied by presents of cows and goats.

The Moghia, 5091 in number, correspond to the Banrior of Rajputana. They are a predatory race, for whose reclamation a special officer has been appointed by Government.

Languages, 19 in number, are spoken in cantonments by 90,811 persons, chiefly Urdu or Hindustani (71,560), Mahrati (6011), English (5646), and Marwari (3023). The rest are Arabic, Bengali, Afghani, Baluchi, French, German, Gujarati, Hindi, Canarese, Panjabi. Mahrati is the court language at Indore, Gwalior, Dewas, and Dhar, but at the other states Hindi and Rangri.

CENTRAL PROVINCES form an administrative division of British India, under the jurisdiction of a Chief Commissioner, lying between lat. 17° 50' and 24° 27' N., and long. 76° and 85° 15' E. The area is 113,279 square miles, and the population 11,548,511. To the north extends the Vindhyan table-land, which sheds its waters northwards into the valley of the Ganges; south of this are the valleys of the Nerbadda and the Tapti; farther south are the extensive highlands constituting the Satpura table-land; and still farther to the south extends the great Nagpur plain, formed by the valleys of the Wardha and Wain-Ganga.

In this expanse there are 18 British districts,—Balaghat, Baitul, Bhandara, Bilaspur, Chanda, Chindwara, Dumoh, Hoshangabad, Jabulpur, Mandla, Nagpur, Nimar, Narsingpur, Raipur, Saugor, Sunbulpur, Seoni, and Wardha. Enclosed in these are the following 15 Feudatory States, comprising about a fourth part of the entire area, with a population of 36 to the square mile:—

	Area.	Pop.		Area.	Pop.
Bestar,	13,062	106,248	Makral,	215	16,764
Kalshandi,	3,745	224,548	Chhuikhadan,	174	32,979
Rajgarh,	1,488	128,048	Kanker,	630	63,610
Sarangarh,	540	71,274	Khairgarh,	940	166,138
Patna,	2,309	257,059	Nandgaon,	905	104,339
Sonpur,	906	175,701	Kawardha,	887	86,382
Ratra Khol,	833	17,750	Bakti,	115	22,819
Bamra,	1,988	81,286			

Races.—The territory is peopled by Aryan and Turanian races. The Dravidian and the Kolarian, two great branches of the Turanian family, are believed to have entered India from the north, at different points, and, when pressed southwards, they decussated and intermingled in the hilly forest tracts of these Central Provinces. Few of their dialects are cultivated, and several of their clans are little above barbarism.

In the entire province, 6,058,300 speak the Hindustani, and 1,967,881 speak Mahrati; but

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amongst the Dravidian clans, 967,502 speak Gondi, and 888,914 of the Kolarian branch speak the Munda tongue. The more open parts of the country have been occupied by intruding civilised races, for 16 Indian tongues are spoken, viz. Bengali, Bhuin, Bygani, Canarese, Dhangar, Goanese, Gujerati, Kaikari, Kashmiri, Malealam, Uriya, Panjabi, Sindi, Tamil, Telugu, and Yerka; as also 7 Asiatic non-Indian tongues and 10 non-Asiatic. The cultivated languages are the Hindi, Urdu, Mahrati, Ch'hattisgarhi, Uriya, Telugu, and Gondi; and the 11 unwritten tongues, Gondi, Gayeti, Rutluk, Naikude, Kolami, Madi or Maria, Madia, Kuri or Muasi, Keikadi, Bhatrain, and Parja.

Non-Hindu or Aboriginal Tribes.

A. Dravidian.

Gond, cultivators and field labourers (clan not specified),	1,617,250	Gond, Ch'hirkia, . . .	8
Worshipping 3 deities, 61		Dholi, . . .	3,508
" 4 " 897		Gaiki, . . .	233
" 5 " 310		Ghasia, . . .	5
" 6 " 3,484		Gawati, . . .	1,140
" 7 " 2,819		Kalar, . . .	4
" 12 " 4		Lohar, . . .	828
Alur, . . .	3,053	Nagarchi, . . .	4,961
Bhoi, . . .	114	Rawat, . . .	28
Burur or Kandra, . . .	1,823	Songali, . . .	56
Gond, Bharia, . . .	29,820	Total Gonds (tribe not specified), . . .	1,640,682
Bhatra, . . .	13,869	Gond, Manne, . . .	1,098
Bhima, . . .	28	Marni, . . .	2,269
Darwe or Naik, . . .	4,017	Maria, . . .	48,715
Deogarhia, . . .	3	Mooria, . . .	31,573
Dhur, . . .	34,288	Nagbansi, . . .	202
Halba, . . .	62,451	Ojha, . . .	2,794
Horia, . . .	3,204	Pardhan, . . .	50,664
Khatulwar, . . .	1,017	Pathari, . . .	11,207
Koilabluhi, . . .	974	Raj Gond, . . .	67,325
Kulbhat, . . .	254	Rawanbansi, . . .	5,852
Koitur, . . .	8,610	Thakur, . . .	62
Koi, . . .	13,128	Thoti, . . .	991
Kolam, . . .	1,516	Turi, . . .	3,712
Agaria, . . .	3,396	Total Gond, . . .	2,040,355
Arak, . . .	2,142	Bhaina, . . .	7,698
Bentkar, . . .	90	Bhuiyan, . . .	5,929
Bhumhar, . . .	279	Bhuan, . . .	7,641
Bhojar, . . .	70	Dal, . . .	1,979
Bhuiyar, . . .	660	Dalbhuiya, . . .	10
Bhuiyar, . . .	8	Dal Kand, . . .	11
Bhoia, . . .	5,771	Dhangar, . . .	1,225
		Dhanwar, . . .	17,849
		Taaln, . . .	1,443
		Total Dravidian tribes, . . .	2,397,216

B. Kolarian Tribes.

Baiga, . . .	18,514	Ganjhu, . . .	5	Manjhar, . . .	1,783
Bhil, . . .	17,583	Khaira, . . .	8,890	Manjhi, . . .	1,580
Bhilala, . . .	13,097	Khairwar, . . .	16,030	Muasi, . . .	1,456
Bhogta, . . .	94	Kharia, . . .	8,890	Munda, . . .	1,919
Bhumia, . . .	13,594	Kol, . . .	76,119	Nagesar, . . .	1,757
Bhunja, . . .	4,453	Kol-katia, . . .	20	Nahal, . . .	7,230
Bijnhwal, . . .	83,868	Korku, . . .	83,438	Nahar, . . .	500
Birjia, . . .	1,395	Gaulan, . . .	15	Pahari (re-	
Bopchi, . . .	529	Korwa, . . .	563	ligion, . . .	6
Cherwa, . . .	423	Kura, . . .	31,044	Nahal), . . .	
Gadba, . . .	199	Mahto, . . .	1,231	Saota, . . .	70
		Total Kolarian tribes, . . .			510,301

C. Unclassified.

Moghia, . . .	702	Others, Sumbulpur	
Yarukala, . . .	30	district, . . .	1,253
		Total Aboriginal tribes, . . .	2,909,402

The races who have most numerously immigrated are the Brahmans and Rajputs. The former number 359,886 and the latter 212,515. By immigrants from all the surrounding races, the territory has over five hundred castes, omitting the washermen, barbers, potters, and similar classes, the more important being as under:—

Agharia, . . .	19,539	Gosain, . . .	27,533
Ahir, . . .	509,526	Gujar, . . .	44,289
Balahi, . . .	35,317	Kach'hii, . . .	116,677
Banya, . . .	76,447	Kalar, . . .	156,297
Banjara, . . .	52,570	Kewat, . . .	165,591
Barai and Tamboli, . . .	26,305	Kolta, . . .	92,827
Beldar, . . .	10,246	Kori or Koli, . . .	48,826
Bhat, Jangra, Rao, . . .	26,621	Kunbi and Kurmi, . . .	740,528
Bhoor, . . .	39,840	Lodhi, . . .	265,147
Bhoi, . . .	12,446	Mali, . . .	115,821
Biragi, . . .	33,427	Manā, . . .	39,454
Chamar, . . .	760,101	Manbhan, . . .	776
Dangi, . . .	23,180	Mang, . . .	19,535
Dhanuk (fowlers), . . .	6,313	Marar, . . .	200,900
Dher, . . .	15,995	Mehra, . . .	242,304
Dhimar, . . .	194,453	Mehtar, . . .	13,712
Ganda, . . .	250,133	Mhar, . . .	321,724
Gaur, . . .	214,936	Paik, . . .	13,804
Gawari, . . .	110,363	Puar, . . .	106,086

Rajputs are here whose ancestors arrived before Hinduism was established. Amongst the Rajput clans there are portions of nations and tribes, with whom, up to the present day, Brahmanism has never been accepted; and many of the non-Aryan races are preferring the theistic doctrines of Nanak and Kabir.

The Rajputs from Malwa seem to have pushed their conquests into the country, and intermarried with them, and their descendants are still known as Rajputs or Gond Rajputs. They established governments, one of which ruled the Narmada valley, and had its capitals at Mundala and at Garha near Jubbulpur. It was founded by Jadu Rai, who succeeded his father-in-law Nagdeo, the Gond raja of Garha (A.D. 358). Mundala was conquered by his descendant, Gopal Sa (A.D. 634). Sungram Sa, the 47th in descent from Jadu, inherited only three or four districts in 1180, but at his death, in 1530, he ruled over fifty-two. Ferishta tells us that when Asif Khan invaded Garha in 1563, Bir Narayan was raja. Hirdi Sa, the 54th raja, built the temple at Ramnagar, near Mundala; and Seoraj, the 59th, began to reign in 1742, when Balaji Baji Rao invaded the country. A second kingdom had its seat on the southern slope of the Satpura Hills, at Deogarh in Chindwara, one of the rajas of which, Bakht Baland, was either taken prisoner by one of Aurangzeb's generals, or visited Dehli of his own accord, where he was converted to Muhammadanism, and then permitted to return to his country, where 'his descendants,' says Mr. Hilslop, 'though adhering to this change of creed, have not ceased to marry into Gond families, and hence the present representative of that regal house is not only acknowledged by the whole race about Nagpur as their head and judge, but is physically regarded a pure Raj Gond.' A third Gond principality had its capital at Kherla in Baitul, to which belonged the famous forts of Gawilgarh and Narnallah. In 1433, its raja, Narsingh Rai, who is represented as powerful and wealthy, was slain in battle by Hoshang Gori, king of Malwa, and Kherla taken. At a later date it appears to have become subject to Pandu Gauli, the raja of Deogarh, and continued so under his successors. Not far from Kherla we find a hill raja at Saolignadh, in Aurangzeb's time, who seems to have maintained his independence till swept away by the Marhattas between 1760 and 1775. A fourth Gond kingdom was that of Chanda on the Wardha, which extended far to the east and south-east. The four dynasties arose before the ascendancy of the Moghuls in India, and have left architectural and

other monuments of great interest. 'The principal architectural remains are at Mandla, at Garha near Jubbulpur, at Chauragadh near Narsingpur, at Deogarh near Chindwara, at Kherla near Baitul, and at Chanda.' There was a *fifth* Gond Rajput dynasty at Warangal or Orankal, in the Dekhan, to the south of the Godavery, which is said to have been founded by Kakati of the Ganapati family, about A.D. 1088. The kingdom became very powerful about the end of the 13th century, and the raja of Orissa, becoming jealous of his neighbour's power, solicited the aid of Ala-ud-Din, who sent an army in 1303, through Bengal, to attack Warangal, but his expedition failed. Malik Kafur was then despatched with 100,000 horse into the Dekhan, and, after a siege of some months, he took Warangal in 1309, and made the raja Ladderdeva tributary. In 1321 it was again besieged by Alif or Jema Khan, the son of Ghains-ud-Din Taghalaq, but he was obliged to retreat with the loss of nearly his whole army. He returned, however, and in 1323 reduced the place and carried the raja prisoner to Delhi. It is said he was afterwards released and restored; at all events Warangal reasserted its independence in 1344, and assisted Ilasan Ganga Bahmani in his revolt. From this time the Bahmani kings of Kulburga involved the native rajns in continual wars. Firoz Shah (1397-1422) especially obtained great successes over the raja of Kherla; and finally Amad Shah Wali took permanent possession of Warangal, forcing the raja to relinquish his ancient capital and flee northward across the Godavery, where he established himself in wild independence among the inaccessible forests. The Gond rajns still maintained their independence, however, and in 1513 we find them joining in a powerful confederacy on the side of Medon Rai against Muhammad II. of Malwa. At the close of the 16th century, Akbar reduced the western portion of Gondwana, but it was not till the middle of the 18th that permanent progress was made. About 1738, Raghoji Bhonsla interfered in a disputed succession in Deogarh, and secured half the revenues; but in 1743 the Gonds raised an insurrection, which Raghoji quelled, and annexed the principalities of Deogarh and Chanda to his own dominions; and in 1751-52 he took the forts of Gawilgarh, Narnalla, and Manikdrug, with the districts dependent on them. From this period large numbers of Mahrattas settled in these districts, and the Gonds became more restricted to the hills.

The great husbandmen and gardener races, the Kachi, Kolta, Kunbi, Kurmi, Lodhi, Mahdela, Mali, and Marar, number 1,531,900 persons, a seventh part of the population of the Central Provinces. They are all immigrants.

The *Kunbi* (451,712) came into the province from Poona, Kandesh, and Maharashtra generally. They are the oldest settlers, and, as in the Mahratta country, Kunbi has come to mean a farmer. They are the backbone of the agricultural community; they distinguish their origin as Mahratta Kunbi, Dekhani Kunbi, and Deskar Kunbi, and those who came from Berar were Mahratta horsemen who accompanied the first Raghoji.

The *Kurmi* are the cultivators north of the Kunbi, but to the south of the Rajput and Jat. They form the bulk of the population in the part of Manbhūm near the Damuda river (Dalton, p.

157), and are a very industrious class of quiet cultivators in considerable numbers in all the central and eastern parts of the N.W. Provinces, and in Hindustan generally, and there attend to the finer garden style of cultivation much more than the Jat and Rajput, but, like the Jat race, are assisted by their industrious women, while the Kunbi women's industry has passed into a proverb: *Bhale jat, Koonbin ki, K'hoorpi hat'h, K'het nirāwen apne pi ke sat'h*.

The Kurmi have villages of their own, and are also spread in detached families or groups. Colonel Tod and Mr. Campbell consider them to be identical with the Kunbi, and to occupy from 16° to 23° or 24° N., and from the western frontiers of Gujerat to the countries watered by the Wain-ganga, the Middle Ganga, and upper streams of the Nerbadda. Very few of these became soldiers, and in the valley of the Ganges they are looked down upon as mere humble tillers of the soil. They are more numerous towards the Jubbulpur and Saugor territories, where they mingle with the Lodha. Thence westwards, as on both sides of the Nerbadda, in Malwa, where they meet the Jat, and throughout the southern borders of Hindustan, there are numerous Kurmi who speak Hindi. Those in Hindustan are darker and less good-looking than Brahmans and Rajputs; but Mr. (Sir George) Campbell states (p. 93) that they are quite Aryan in their features, institutions, and manners. Other authorities, however, think that there is no similarity in the physiognomy of the Kurmi and Kunbi. The Kurmi subdivisions are—Jeshwar, Dhaviai, Patan, Adhonda, Patrihu, Ghora Charhao; but Sir H. Elliot says the seven subdivisions are usually enumerated as K'hureebind, Puturya, G'horchurha, Jyswar, Canoujia, Kewut, and Jhooneya. Wilson also says they have seven sections.

The *Ghameta* of Behar are a subdivision of the Kurmi. They form, says Elliot, a large class of the cultivators in the eastern and central portion of Bengal; few in Delhi and the Upper Doab.

The *aboriginal* races to a large extent (1,763,917) adhere to their peculiar religions, and their tendency is towards some form of monotheistic cult. A summary shows—

Hindus,	8,703,110	Aboriginal,	1,753,917
Sikh,	99	Religions—	
Kabirpanthi,	317,094	Parsee,	399
Satnami,	398,409	Jew,	63
Kumbhipathia,	913	Christian,	11,973
Brahmo,	7	Muhammadian,	285,687
Jaina,	45,911	Unspecified,	12
Buddhist,	17		

The *Kabirpanthi*, followers of Kabir, and their sect the *Dadupanthi*, have departed from Kabir's monotheistic teachings; the majority continue to worship their own gods, but invoke Kabir as an additional deity. The chief guru of the sect resides at Kawardha, in the Bilaspur district. The system of caste has been introduced, and all ceremonies are performed by Hindu priests according to established ritual.

The *Sad'h* mendicants, who beg from door to door in pairs, own allegiance to the chief guru at Kawardha. In the Central Provinces, most of the *Kabirpanthi* are married people, whereas in Northern India they are celibates.

The *Nanakpanthi*, and its sect the *Nanakshahi*, continue to follow the inculcations of Nanak.

The *Singhapani*, followers of Singhaji, a holy

man, have temples in the Hoshangabad and Ninar districts, which are frequented by people of all castes.

The *Satnami* sect was founded by Ghasi Das, a Chamar, between the years 1820 and 1830, amongst the people of his own tribe in Ch'hattisgarh. Their title means the True Name. They are theistic sectarians, with some rules as to diet and narcotics.

In the 15th century, in Rewah, Itohi Das, a Chamar, had put forward similar views, but that reform had not taken a permanent hold of the people. Ghasi Das has been more successful, and the entire Chamar tribe are carrying out his injunctions with more or less strictness. Their widows re-marry. They have no tradition as to the date of their arrival in this province, nor as to the cause of their being designated Chamar, meaning leather-worker. They have active, well-set figures, of a brownish colour, with features less marked than those of the higher castes. They are fair cultivators, industrious, tenacious of their rights, and numbers of them are in easy circumstances. Their women are strong and sturdy, and many of them are fair and comely. The Kabirpanthi and Satnamni theists are being daily added to.

The *Dhami* sect of the Damoh and Saugor districts combine the reading of the Koran with the observances of the Hindu religion.

The *Aghori* are Hindu beggars, who extort money from people by eating loathsome substances in their presence.—*Tod's Rajasthan*, ii. p. 371; *Elliot's Supp. Glossary*.

GONDWANA.—Between lat. 18° 40' and 23° 40' N., and long. 78° and 82½° E., an area of 135,000 square miles, is a mountain and forest region which was known to the Moghul geographers as Gondwana. It was held by the Gond chieftains who were dominant until overcome by the Marhattas in the early part of the 18th century, and they are now under the sway of the British in Jeypore, Berar, Chutia Nagpur, and the Central Provinces, and under the Asaf Jahi dynasty of Hyderabad.

Gonds are amongst the most numerous of the tribes of the Central Provinces. They are found in the north, about Saugor and the source of the Narmada. On the east they cross that river into Sirguja, where they border on the Kol, and are found with the Khand and Uriya in Nowagudda, Kareal, and Kharond or Kalahandi. In the south they form the mass of the population of Bastar, and a portion of the inhabitants of Jeypore in the Madras Presidency, and occupy the hills along the banks of the Godavery, about Nirmul, in the Hyderabad country; and on the west they are intermingled with the Hindus of Berar for 30 miles from the right bank of the Wardha, and along with the Kur extend along the hills both north and south of the Nerbadda to the meridian of Hindia, where they give place to the Bhil and the Nahal.

The Gonds divide themselves into twelve and a half castes, viz. Raj Gond, Raghuwal, Dadarc, Katulya, Padal, Dholi, Ojhyal, Thotyal, Koilabhtal, Koikopal, Kolam, Madyal, and an inferior sort of Padal as the half caste. Mr. Hislop says the first four, with the addition, according to some, of the Kolam, are comprehended under the name of *Koitor*, the Gond par excellence. This term, in its radical form *Koi*, is the name given also to the Meriah sacrificing tribes of Orissa, and

to the wild tribes skirting the left bank of the Godavery, from Rajamundry to near the mouth of the Indrawati. The *Koitor*, as a rule, resent with no small vehemence the imputation of belonging to any portion of the Hindu community. The first three classes generally devote themselves to agriculture; the fourth includes those who have begun to conform to the Hindu religion and ape Hindu manners. The *Padal*, Pathadi, Pardhan, or Desai, called Raj Pardhan to distinguish them from the Mahrati-speaking half caste, who play on wind instruments of brass and spin cotton thread, are the religious counsellors or bhats of the upper classes. The *Dholi* are musicians, and a subdivision of them in jungle districts are employed as goatherds. The *Ojhyal* are wandering bards and fowlers. The *Thotyal* (i.e. maimed) or *Pendabarya*, 'minstrels of God,' are also called *Matyal*, because their songs are chiefly in honour of Mata, the dreaded goddess of small-pox. They make baskets also. The *Koilabhtal* are the third wandering caste, and their women are dancing girls. They follow their profession chiefly among the Hindus, it being reckoned disreputable by the people of their own race. The *Koikopal*, i.e. *Gondi Gopal*, are a settled class devoted to cow-keeping. The *Madya*, called *Jhodia* in Bastar, are savages on the Beila Dila Hills and in the remoter parts of Chanda; the only clothing the women wear is a bunch of leafy twigs fastened with a string round their waists to cover them before and behind. In this they resemble the Juanga to the south of the Kol country, the Chenchu near the Pulicat lake and to the north of Ellore; and till about A.D. 1830 a similar custom existed among the Holier near Mangalur. The *Kolam* extend along the Kand'hi Konda or Pindi Hills, on the south of the Wardha river, and along the table-land stretching east and north of Manikgad'h, and thence south to Danttanpalli, running parallel to the right bank of the Pranbita. They do not intermarry with the common Gond, but the one attend the nuptials of the other, and eat from their hands. Connected with the Gonds, though not included in the preceding classes, are the *Badiya* between Chindwara and the Mahadeva Hills, who have conformed to the Hindus in their language and some religious observances; the *Halwa*, pretty numerous in Bastar, Bhandara, and Raipur, who covet the distinction of wearing a sacred thread, a privilege, till recently, sold to those in Bastar by the raja; the *Gaiti* Gonds in Bastar who call themselves *Koitor*; the *Moria* Gond, who are the principal agriculturists in Bastar; and the *Naikude* Gond, inhabiting the jungles on both banks of the Pain-Ganga, and especially the tracts between Digaras and Umarkhed, and found about Aparawapet, and as far as Nirmul, who have adopted the Hindu dress, and will not eat beef, but they live by the chase, or cut wood and grass, and are a terror to their neighbourhood by their depredations.

Marriage.—The Gond of Nimar serve for a wife, but practise forcible abduction of the bride, with a mock fight. They are polygamic.

Dulha Deo is a favourite deity in Bundelkhand and amongst the Gond of Central India. It is the apotheosis of a bridegroom (*dulha*) who died in the marriage procession, and whose death so affected the people that they paid him divine

honours. The worship of Adonis is similar, and also that of Thammuz, whose annual wound in Lebanon allured the Syrian damsels to lament his fate.

The Gond of Mandla have the Lamjina Shadi, in which the betrothed lad serves an apprenticeship for his future wife. A Gond girl, however, may exercise her own will and run off with a man, but it is quite allowable for her first cousin or the man whom she has deserted to abduct her from the man whom she has chosen. The Shadi Bandhoni is a compulsory marriage. In the Shadi Baitho, a woman goes to a man's house. Widows re-marry either to a younger brother of their deceased husband, or to some other man.

The *leaf ordeal*, in Bastar, is followed by sewing up the accused in a sack, and letting her down into water waist-deep; if she manage, in her struggles for life, to raise her head above water she is finally adjudged to be guilty. Then comes the punishment. The extraction of the teeth is said in Bastar to be effected with the idea of preventing the witch from muttering charms, but in Kamaon the object of the operation is rather to prevent her from doing mischief under the form of a tiger, which is the Indian equivalent of the loup-garow.

Religion.—The Gond clans are generally spirit-worshippers; all of them bring the spirit back to the house. If a man of the Bygal of Raipur die, three days afterwards his son throws grain before a fowl. If it eat any of the grain, he believes that the spirit of the father has entered the house, and the fowl is sacrificed thereto. Similarly with the Binjwar of Raipur, on the third day the relatives take a pot of water to the village tank, and bring back the spirit of the deceased to his house, where he is thenceforward worshipped. The Bunjia bring the dead mau's spirit back to the house in a pot of flour.

The Bilaspur Gond worship a raised earthen mound, under the name Bura Deo. They worship also a branch of the Saj plant, a species of euphorbia. Pharsapend, the god of the Gond of Chanda, is represented by pieces of iron in an earthen pot, and suspended from a tree remote from the village and from the high road.

BENGAL PROVINCE occupies the lower part of the valleys of the Ganges and the Brahmaputra, but gives its name to an administrative circle, with an area of 193,198 square miles, and a population of 69,536,861, part of the area, 36,634 square miles, comprising the hilly districts of Koch-Bahar, Hill Tipperah, the Tributary States of Orissa, Chutia Nagpur, and Behar.

In Sind, conquering and fleeing races have been stopped by the Indus, the ocean, and the Indian desert; in the Panjab, the further southern progress of advancing tribes has been barred by the many rivers, and by the fronting nations of Aryans, Jat, and Rajput settled in the Gangetic plain; and, similarly, many great tribes who are distinct from the races in other parts of India, and who keep aloof from each other, have been cooped up into the river and hill regions of Bengal. Amongst such may be mentioned the Babhan, Baori, Barui, Bhumin, Bhumi, Bind, Dosadh, Gareri, Kandara, Kapali, Karan, Khandait, Kharwar, Koch, Kol, Madak, Mal, Pan, Poi, Rajwar, Sadgop, Santal, and Tiar. There are even now in Bengal 58,319 Asiatics other than natives of India and British Burma.

Bengal is under the jurisdiction of a Lieutenant-Governor, and comprises the four provinces of Bengal proper, 76,406 square miles; Behar, 14,139 square miles; Orissa, 9053 square miles; and Chutia Nagpur, 26,966 square miles; with 36,634 square miles of Feudatory States. These great provinces are arranged for administrative purposes into nine revenue circles, each under a British officer; their respective areas, in square miles, and population, being as under:—

	Area—Sq. Mile.	Population.	Per Sq. Mile.
Bhagulpur, . . .	20,492	8,063,160	393.48
Bardwan, . . .	13,855	7,393,054	533.67
Chittagong, . . .	12,118	3,574,048	294.94
Chutia Nagpur, . . .	26,966	4,225,989	156.72
Dacca, . . .	15,000	8,700,939	580.06
Orissa, . . .	9,053	3,730,735	412.10
Patna, . . .	23,647	15,063,944	637.03
Presidency, . . .	12,029	8,204,912	682.09
Rajshahi, . . .	17,428	7,733,775	443.76
Feudatory States, . . .	36,634	2,845,405	77.67
All Bengal, . . .	193,198	69,536,861	371.41

Religion.—The Census return for 1881 has classed the religions of these millions under ten headings, as under:—

Hindu, . . .	45,452,806	Sikh,	549
Muhammadan, . . .	21,704,724	Jain,	1,609
Aboriginal, . . .	2,055,822	Parsee,	156
Buddhist, . . .	185,809	Jew,	1,059
Christians, . . .	19	Brahmo,	788
sects,	128,135	Unspecified, . . .	35,404

A remarkable feature in this summary is to be seen in the great numbers who profess Islam. The total number in all India of this persuasion is 50,121,585, and almost one-half of that number is in Bengal. Many of them are found in Eastern Bengal and the adjoining districts of Sylhet and Cachar, and in the two districts of Bogra and Rajshahi, and there they comprise the bulk of the cultivating and labouring class; while in Chittagong and Noakhali they follow a seafaring life. When they embraced this religion is not known, nor is it known from what race of aborigines they were converted, and few of them present any peculiar features. The Malik or Mullak of Behar are supposed to have been converted Rajputs. They cultivate land, and the wealthy possess considerable landed property, but generally they are employed as land-agents and peons. They use toddy freely, and are turbulent when under its influence. They do not intermarry with other Muhammadans; their marriage ceremonies are kept secret, and are conducted by women. Others of the Muhammadans retain portions of their former creeds. Many of the Bedi tribe of Bengal, for instance, have adopted Islam and are circumcised, but continue to worship the Hindu goddess Kali.

The *Hindus* have all adopted that caste system which is so intimately bound up with other parts of their religious and social life. The number of their castes is supposed to be about 1000, and the more prominent among them are the Adhikari, Babhan, Baidya, Bhat, Brahman, Deswali, Dogla, Ghatwal, Karan, Kayasth, Khandait, Khandwal, Kishupachi, Mahanti, and Rajput. There are 265 minor castes, numbering 1,371,260 persons.

The *trading* castes, 963,159 in number, are the Banya, Konati, Muniyara, Nuniyar, Panwaria, Suratwala, and Vesya, but the nations of all parts of Asia, Europe, and America have here their representatives engaged in commerce.

The *pastoral* castes, in number 4,115,377, com-

INDIA ; THE BENGAL PROVINCE.

prise the Bhartia, Gandhari, Gareri, Gordha, Gujar, and Goala.

47 Aboriginal Tribes, 1,365,215, viz.—

Asur,	225	Korwa,	8,961
Bhar,	20,870	Kuki,	2,102
Bhumij,	226,107	Lepcha,	26
Birhor,	1,539	Lushai,	2
Boyar,	1,874	Mech,	9,288
Brijia,	3,926	Morung,	1,126
Chakma,	15	Munda,	95,587
Cheru,	15,665	Murmi,	5,128
Dhangar,	38,484	Naga,	10,931
Dhanpur,	971	Naiya,	1,288
Dhimai,	1,327	Nat,	26,560
Gar,	198	Oraon,	45,638
Gond,	1,601,722	Pahari,	6,168
Juang,	529	Puran,	15,983
Kandh,	36,911	Rautia,	27,692
Karni,	809	Reang,	900
Kaur,	27,109	Santal,	203,264
Kawar,	481	Saont,	4,337
Khanjar,	4,993	Tasla,	12,961
Kharria,	22,356	Tamaria,	4,288
Khasya,	1,227	Tharu,	17,109
Khodai,	9	Tikayat,	95
Kish,	26,485	Tiperah,	16,140
Kol,	257,803		

53 Semi-Hinduized Aborigines, 10,618,451, viz.—

Bagdi,	758,870	Kadar,	6,208
Baheliya,	13,838	Kandara,	120,906
Balai,	8,317	Keora,	92,697
Bari,	27,758	Khaira,	49,569
Batar,	2,548	Kharwar,	195,242
Bathudi,	24,210	Khoris,	2,684
Bauri,	481,493	Khyen,	23,798
Bediya,	18,076	Kooh,	1,648,422
Bhui-Mali,	54,094	Kodmal,	24,763
Bhuinya,	483,656	Koranga,	8,567
Bind,	136,812	Labhana,	137
Buna,	48,469	Mahili,	27,631
Byad,	2,246	Mal,	1,251,288
Chain,	95,315	Maler,	2,888
Chamar,	1,408,087	Mal Paharia,	13,260
Chandal,	1,576,076	Mandai,	12,618
Chik,	29,084	Markande,	13,357
Dai,	2,633	Mehtar,	65,331
Dalui,	4,843	Mukhari,	331
Dom,	343,246	Mushabar,	545,673
Dosadh,	1,134,388	Pan,	680
Gangsauntah,	88,123	Pasi,	164,595
Ghasi,	41,781	Pandit,	660
Ghusuria,	4,811	Rajwar,	130,448
Hadhihatri,	16,407	Shikari,	2,086
Hari,	286,109	Turi,	30,787
Jetur,	337		

Bengal Aborigines.

Bhil,	87	Korwa,	22
Bhumij,	129	Mahili,	2,510
Brijia,	376	Munda,	14,310
Chuar,	5,766	Nagpuri,	1
Dhangar,	4,835	Paharia,	50,906
Karwa,	6,888	Poithalik,	362,521
Kharria,	44	Santal,	1,087,202
Kharwar,	112	Uraon,	21,115
Kol,	871,666		

Hill Tribes of the Northern Frontier, 39,023.

Gar,	27,450	Manipuri,	8,813
Khasya,	26	Naga,	1
Kuki,	2,733		

Tribes of the Assam Valley.

Mech,	2,153	Assamese,	66
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Tribes of the Chittagong and Tiperah Hills, 47,157.

Chakma,	211	Reang,	11,688
Lushai,	1	Tiperah,	35,257

38 Agricultural Castes, 6,875,197, viz.—

Aguri,	86,445	Gollah,	59,287
Harui,	218,812	Kalbhartha,	2,100,379
Chassa,	534,061	Kamkar,	11,997
Chassa-dhopa,	33,138	Koeri,	1,204,884
Dass,	20,213	Kurmi,	1,213,422

Mali,	216,108	Savara,	82,952
Nagar,	20,100	Sud,	24,729
Orha,	34,576	Sudra,	135,467
Paik,	38,575	Tamoli,	108,640
Raju,	73,503	Others,	48,962
Sadgop,	557,947		

15 Labouring Castes, 546,839, viz.—

Beldar,	99,334	Samanta,	15,847
Chuniya,	9,788	Khattik,	11,519
Dhuliya,	88,020	Matia,	18,670
Kora,	43,565	Pandari,	23,904
Naik,	33,442	Tursha,	78,284
Nuniya,	279,861		

23 Boating and Fishing Castes, 2,131,433, viz.—

Goklia,	32,302	Mallah,	470,676
Gonhri,	86,217	Manjhi,	65,361
Jaliya,	381,540	Patuni,	72,013
Jhalo,	19,454	Pod,	325,755
Kawat,	254,873	Tiar,	949,117
Koral,	46,120	Others,	16,520
Let,	11,485		

9 not recognising caste, 683,227, viz.—

Atith,	61,692	Gosain,	23,062
Aughar,	565	Mohant,	2,479
Baishnab,	568,032	Sakta,	131
Fakir,	26,826	Sutrasahi,	93
Giri,	347		

Languages in Bengal.

Arabic,	905	Finnish,	1
Armenian,	737	Gar,	24,949
Bengali,	36,416,978	Gondi,	1,294
Burmese,	1,584	Hungarian,	11
Canarese,	34	Irish,	89
Chinese,	850	Japanese,	1
Dutch,	55	Kandh,	52,357
English,	37,464	Kharria,	1,893
French,	414	Khasi,	1
German,	372	Kol,	1,026,775
Gujerati,	1,068	Koch,	5,631
Hebrew,	450	Lap,	1
Hindustani,	21,799,081	Lepcha,	4,611
Kashmiri,	91	Limbu,	277
Mahrati,	344	Madraai,	632
Malealam,	65	Malay,	8
Marwari,	3,363	Maler,	57,777
Nepalese,	89,855	Manipuri,	127
Panjabi,	608	Mech,	11,101
Pushtu,	381	Mughi,	15,709
Persian,	2,336	Murmi,	652
Portuguese,	297	Norwegian,	84
Tamil,	1,623	Roumanian,	6
Telugu,	11,310	Russian,	60
Turkish,	9	Polish,	4
Uriya,	5,450,818	Santali,	1,120,446
Welsh,	5	Scotch,	82
Italian,	255	Swiss,	2
Greck,	94	Siamese,	1
Unspecified,	335,129	Singhalese,	2
		Spanish,	63
		Swedish,	132
		Tibetan,	11,850
		Tiperah,	95
		Urnaon,	38,982

The races and castes are thus summarized :—

20 Asiatics, other than natives of British India,	38,319
47 Aboriginal tribes of India,	1,365,215
53 Aboriginal tribes, semi-Hinduized,	10,618,451
6 Hindus, superior castes,	4,897,426
13 " intermediate castes,	2,777,124
7 " trading castes,	963,159
7 " pastoral castes,	4,116,377
3 " cooks,	924,984
38 Agricultural castes,	6,875,197
14 Serving castes,	2,804,003
22 Artisan castes,	4,432,471
19 Weaver castes,	1,619,344
15 Labouring castes,	546,839
23 Boating and fishing castes,	2,131,433
15 Dancer, musician, beggar, and vagrant castes,	43,253
9 not recognising caste,	683,227
11 enumerated by nationality only,	48,114

Sex.—Bengal is, for India, in the unusual position of having more of the female than of the male sex, the respective numbers being 34,911,270 and 34,625,591, but they largely continue the Hindu practice of giving their young girls in marriage to full-grown or even middle-aged men. The necessary result follows in a great number of widows, and while there are in Bengal 1,375,217 widowers, there are 7,401,629 widows.

The *racés* in the Bengal, Behar, Chutia Nagpur, and Orissa provinces in their mental and physical characteristics are widely dissimilar. The *Bengali* of Bengal proper lives amid a network of rivers and morasses. He presents a weak and puny appearance, but he is able to endure an amount of exposure to which a native of the Upper Provinces of Hindustan would soon fall a victim. In active pursuits, the Bengali is timid and slothful, but in intellect he is subtle and sharp-witted; and these qualities, combined with a plodding industry and a fondness for sedentary work, have enabled the race to obtain employment in all the offices of the Indian Government, and to rise to some of the highest judicial posts in the land.

On the south-west of Bengal are the *Uriya* people of Orissa. They are even more timid than the Bengali race. They are conservative to a degree, are wanting in enterprise, contented to follow the practices of their forefathers, and evincing a thorough dislike of all modern improvements. They are the most bigoted and priest-ridden race in British India.

On the north-west is the province of *Behar*. It is occupied by a hardier and more manly race, who speak Hindi, the language of Upper India, and are usually called the *Hindustani*. They are more decidedly *Aryan* than any other of the races found in Bengal. Even the semi-aboriginal tribes of Behar are of a better build and of a nobler nien than similar tribes in Lower Bengal.

Besides these three distinct nationalities, the Province of Bengal contains several tribes who have been but partially subjected to *Aryan* influence, and have hardly as yet come within the pale of civilisation. They are evidently of prior arrivals in the districts which they now occupy, but wave after wave of immigration has poured into India in bygone ages, and no one can say who were the real first comers. These tribes are found in masses throughout the province, and, though much mixed up together, they retain their customs and habits distinct. Besides these, there are within each nationality numerous tribes and castes of various origin and race, and in various degrees of civilisation. Amongst them, the *Aryan Brahman*, who traces his lineage back to the time when *Kanauj* was dominant, and the half-civilised *Koch* or *Poliya* of *Dinajpur*. These are probably the representatives of two perfectly different stocks; but even where no distinction of race can be traced, there are frequently found tribal subdivisions with ethnical peculiarities of their own.

The number of separate tribes and castes in the Bengal Province probably do not fall short of one thousand. If their respective subdivisions and *septs* or *clans* be taken into account, they would probably amount to many thousands. The aboriginal tribes alone are very numerous; while those for whom, though *Hinduized* to a certain

extent, an aboriginal origin may be claimed would swell the number by a very large amount.

The *Babhan* (1,031,501) are a fine, manly race, who claim to be *Sawaria Brahman*s. They adopt from the *Rajputs* the honorific terms *singh* and *rai*, and take those of *tewari*, *miser*, and *panre* from the *Brahman*s.

Baisnab (568,032) is not a race, but a *Vaishnava* sect in Bengal, where the letter 'v' is changed into a 'b'; and they are also called *Boistab*. The sect claim to be followers of the tenets of *Chaitanya*. They are reformers, admit with initiatory rites all comers into their number; they have no separate caste distinctions, but have *Brahman*s as *gurus*. They abstain from animal food and from intoxicating liquors. Many are married, and the lives of those who are single are generally said to be immoral. The doctrines of *Chaitanya* enjoined the living heart worship of *Vishnu* (*Bhagat* or *Bhakte*), and the putting aside of symbols and ceremonies. Much of the finest portion of the poetical literature of Bengal almost wholly originated with the *Baisnab* sect.

The *Baori* (481,493) take the *heron* as the emblem of their tribe, and must not be eaten by them. The dog is sacred to them.

The *Bhar* afford an illustration of the vicissitudes of nations. At present are largely *swineherds*, but before the arrival of the *Aryans* they were rulers over the country from *Rhotas* to *Rewah*. The *Bharata* of the *Puranas* are supposed to have been *Bhar*, and the *Amethia* and *Purihar* *Rajputs* are said to be *Bhar*. The goddesses at *Patna* and *Gya* are supposed to have been erected by this race. Many stone forts remain in the country formerly ruled by the *Bhar*, and are said to have been their handiwork. The *Bhar*, the *Cheru*, and the *Pasi* have given their daughters in marriage to *Rajputs*.

Birhor (1539) are said to have, till lately, been given to cannibalism. A *Birhor* whose end was approaching would invite his clan to assemble to feast on his body.

*Brahman*s are a numerous and influential race, most of them of *Aryan* origin, but they are kept apart by social and clan distinctions, and are distributed throughout all India, in number 7,123,909, a third part of whom (2,754,100) being in Bengal. They are to be seen in every station in life, and in every avocation, as office-holders, learned men, fortune-tellers, guides to pilgrims, musicians, astrologers, beggars, funeral performers, cultivators, priests in all parts of the country, and even coolies in Nepal. *Brahman*s of Orissa have two great divisions, the *Vaidik* or learned class, and the *Laukik* who engage in business, in husbandry, as gardeners, and even as bricklayers.

Butia or *Bhotesa* amongst the people of *Hindustan* is applied to any Tibetan. Many are employed in the N. of *Bhagulpur* as coolies. *Butia* of *Bhutan* burn their dead, and throw the ashes into the nearest stream. They are Buddhist and shamanist.

Chandal or *Charal* (1,576,076) are a hardy race, capable of enduring considerable exposure and fatigue. In the *Ramayana*, the powerful prince of *Oudh* is represented as courting the alliance of *Gohurka*, a *Chandal* chief. They are now, throughout all Northern India and Bengal, in a subordinate position, usually as labourers.

Cheru (15,665), like the *Bhar*, were once

dominant. They have a tradition that, starting from Mooring, they took Kamaon; thence they made themselves masters of Bhojpur. Subsequently (1611) they took possession of Chum-purun, and in 1613 occupied Palamow. According to another legend, they ruled in Behar, whence they were expelled by the Sivira, who were again thrust out. They claim to be descended from the great serpent, an indication of their Mongoloid origin. They eat flesh. Their women assist in the field labours.

The *Dom*, in Bengal 343,246, and in all India 721,655, are widely dispersed throughout the northern parts of British India, dwelling outside the towns and villages apart from the settled population; they have several sections. They work as blacksmiths, carpenters, masons, weavers, are miners and musicians, fan and basket makers, gravediggers, and executioners. They serve Europeans as sweepers, cooks, and their women as ayah ladies'-maids. Dom women are famed for their good looks, and are notoriously unchaste. They perform in the women's apartments. The Hindus do not permit them to draw water from the same wells. They construct the funeral pyres of the Hindus, and supply the fire. They worship stones, to which they sacrifice fowls and goats.

Dosadh (1,138,651).—Nearly all in Bengal claim to be descendants of, and they worship as a demon, the astronomical umbra Rahu, the moon's ascending node, which they say causes eclipses.

Gaola in Bengal number 3,992,949. They are a pastoral race, following the same pursuits as the Ahir and the Gopa. They are as far south as Hyderabad in the Dekhan, but many have settled down in villages as dairymen, with large herds of cows and buffaloes. They are of strong, powerful frames. In Behar are turbulent, so greatly so, that Patna Gaola is a term of reproach.

Ghatwal (113,173).—Nearly all in Bengal are descendants of men who were employed in Behar in keeping the passes open.

Juanga, chiefly of Orissa, number only 529 in Bengal. Their women, until 1871, had as their sole covering a string of beads around their waists, into which they stuck a bunch of leaves before and another behind.

Kaibhartha, in Bengal 2,100,379, and in India 2,137,540, are the great cultivators of Bengal, and many take Khasiya as their designation.

Kayasth, in Bengal 1,450,843, and 2,159,813 in all India, have twelve sections. They are essentially a caste of scribes, and are to be seen in the service of all the native courts, and in the offices of the Indian Government. They eat and drink freely. Their women are strictly secluded.

Khandait (617,017), from Khandia, a sword, are descendants of military retainers, who had their lands on a strictly military tenure, but are now undistinguishable from other husbandmen. They and the Paik are of a similar position.

Koch (1,878,884) are chiefly in Koch-Bahar, with numbers of them in Mataya-des and Kama-rupa, i.e. in Rangpur, Lower Assam, and Purnia. The Koch kingdom was founded by Haju, about A.D. 1550. The Koch, Mech, and Bodo are often classed together, but Colonel Dalton regards these as distinct races. The Pali or Paliya are supposed to be of Koch origin. They have several sections. With the Pali-Koch women, when they marry, property vests in the wife, and descends

to her daughters; the husband goes to the wife's house, and is subject to her. They sacrifice to the sun, moon, and stars, also to the deities of the woods, hills, and rivers, and to the manes of their progenitors.

The *Koeri* (1,204,884), called also Muari and Murao, are the best spade husbandmen, and largely engage in poppy cultivation and the manufacture of opium, with other garden produce.

Kol is a term said to be of Sanskrit origin, and to have a derogatory meaning, but applied by Hindus to aboriginal tribes of Chutia Nagpur, of two distinct families, the Kolarian and the Dravidian, whom Colonel Dalton thus classed:—

A. Kolarians who speak the Munda language or allied to it, viz.—

Asur.	Birhor.	Kharria.	Korwa.	Munda.
Bhumij.	Ho.	Kora.	Muasi.	Santal.

Kolarians who have lost their own original language —

Cheru.	Kharwar.	Kisan.	Saont.
B. Dravidians.			
Bhuiya.	Gond.	Mal.	Sabar, and
Bhuiher.	Kandh.	Oraon.	many
Binjhia.	Kaur.	Rautia.	others.

In the census of 1881 they are arranged by Mr. Bourdillon somewhat differently:—

Kolarians, 30,244, viz.—			
Munda,	14,310	Bhumij,	129
Karwa,	6,888	Kharwar,	112
Chuar,	5,766	Bhil,	87
Mahili,	2,510	Kharria,	44
Brijia,	376	Korwa,	22
Dravidians, 25,948, viz.—			
Oraon,	21,115	Dhangar,	4,835
Indefinite, 413,428, viz.—			
Poithalik,	362,521	Nagpuri,	1
Paharia,	50,906		

The following is Mr. Bourdillon's distribution:—

Chutia Nagpur,	791,750	Orissa,	1,062
Behar,	15,644	Feudatory States,	62,635
Bengal,	575		

Kurmi are largely occupied as gardeners and husbandmen. They number 4,065,075 in Northern India, and of these 1,213,422 are in Bengal.

Mal, 125,238 in Bengal, and 16,876 in Assam, are supposed to have long occupied the districts near the Ganges and bordering on the Bay of Bengal. Pliny writes of 'Gentes Calinga proximi mari, et supra Mandei Mali, quorum Mons Mallus, finisque ejus tractus est Ganges.' Also, 'Ab iis (Paleothris) in interiore situ Monedes et Suari quorum Mons Maleus.' Mr. Beverley thinks that the Mal take their name from the Dravidian word Mallai, a hill, and that they were driven eastward over all Bengal, where they fell into their present position of society.

Mech (9288) stretch along the base of the mountains of the Sikkim, Bhutan, and Nepalase Hills, from the Kauki river to the Brahmaputra. The malaria of the forest, so deadly to strangers, has no effect on them. Their features are of a strong Mongolian caste. They call themselves Bodo or Boro.

Mugh are in the south of Chittagong and in the hill tracts, and they settled in the Sunderbans about A.D. 1780, when they fled from their homes on war breaking out between the king of Burma and the rajahs of Arakan, but they love to revisit their homes in the fair weather season of the year. Their general physique is strongly Mongolian. They are Buddhists. The

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term Mugh was applied to the fire-worshippers of Persia by the Arabs, and to any non-Muhammadan.

Nat (26,560) are a vagrant, wandering race, with habits and occupations assimilating to those of the gypsies of Europe.

Oraon (45,638) call themselves Khurnkh, and the younger men of the tribe Dhangar. They are honest, industrious workers, are a merry, light-hearted people, excessively fond of dancing, which is their great national amusement. They are known to Europeans as part of the Kol, but they are not Kolarians. Oraon have a Dumkuria, or Morang hall, in which the unmarried men and some of the married sleep. Any absentee is fined. In this hall are kept all the flags and instruments used in their dances. In some Oraon villages also there is a sleeping-house for the unmarried girls, with an elderly woman to look after them. The names of the Oraon clans are taken from animals, which are sacred to the particular tribe.

Pasi, 164,595 in Bengal, and 1,033,184 in the N.W. Provinces, are watchmen, fowlers, swineherds, labourers, and agriculturists, and spread throughout the N.W. Provinces and Behar, but they too, like the Bhar and the Cheru, were formerly rulers in the land. They were owners of the pargana of Khyrabad in Oudh, in the time of Prithi-raj in the 12th century, and they fought on the side of the Chandal against the Chauhan. Since then they have been highly predatory.

Puran of Orissa assert that they and another race were produced from a peafowl's egg,—the *Puran* from the white, and the *Kharria* from the shell.

Rajwar have many clans, some of them cultivators, others predatory. They are of mixed origin, but chiefly aborigines.

The *Santal* (in Bengal 1,128,190, and in Assam 7744) say of their origin that a wild goose came from the great ocean, and alighted at Ahiri-pipri, and there laid two eggs, from which issued the first parents of the Santal. The Santal have twelve clans, one of them is the Murnu, which is their name for the *Portax pictus* antelope, and the clan must not kill it, nor eat its flesh.

The Santal parganas are 140 miles N.W. of Calcutta, in a wild and sparsely populated country. For revenue and administrative purposes, these are arranged into four sub-districts. The Santal and Paharia have regular village institutions, with a manjhi or headman, and similar to the Munda and Maniki among the Kol and Ho. Over the Santal manjhi are headmen of hundreds called parganas. The Santal have no written language of their own; very few of them can write either Hindi or Bengali, and they aided in the census operations by tying knots on strings of different colours to distinguish males from females, and children from adults. In Bengal proper, Santals are mostly in the Midnapur and Bancoorah districts, others are in Orissa. They have six domestic ceremonies, viz. (1) Admission into the family, (2) into the tribe, (3) into the race, (4) betrothal, (5) cremation, (6) placing three fragments of the skull into the Damodar gods and demon. They are exogamic.

Dosadh are constitutionally brave. A number of them fought in Clive's army at Plassey.

CALCUTTA, the capital of Bengal, metropolis of all India, and the seat of the Government of India, is built on the left bank of the Hoogly, a branch of the river Ganges.

	Males.	Females.	Total.
Town proper, . . .	257,778	143,893	401,671
Fort-William, . . .	3,002	346	3,348
Suburbs, . . .	147,205	104,234	251,439
Port, . . .	28,037	163	28,200
Total, . . .	436,022	248,636	684,658

It has a large Muhammadan population, 221,013, chiefly men, 147,788, with 73,225 females. There are 89 Hindu castes, the more important being—

Agarwala, . . .	2,460	Kamar, . . .	4,873
Aguri, . . .	1,373	Kansari, . . .	2,009
Bagdi, . . .	3,760	Kaora, . . .	1,113
Baidya, . . .	2,684	Kayasth, . . .	37,474
Baisnab, . . .	7,026	Khandait, . . .	913
Banya, . . .	3,168	Khetri, . . .	1,233
Brahman, . . .	38,763	Kumhar, . . .	1,193
Chamar, . . .	8,569	Kurmi, . . .	2,620
Chetri, . . .	5,892	Koeri, . . .	545
Dhopa, . . .	4,053	Madah, . . .	3,849
„ Khasa-Dhopa, . . .	435	Mehtar, . . .	7,124
Dom, . . .	1,674	Najit, . . .	5,842
Dosadh, . . .	3,385	Rajput, . . .	720
Gandabanik, . . .	6,879	Sarnakar, . . .	2,414
Gawala, . . .	14,364	Satgop, . . .	8,626
Jelia, . . .	2,086	Subarnabanik, . . .	14,567
Jogi, . . .	292	Sunri, . . .	3,468
Kahar, . . .	8,727	Sudradhar, . . .	3,604
Kaibartha, . . .	12,680	Tambuli, . . .	2,411
Kalu, . . .	2,878	Tanti, . . .	12,928
Kalwar, . . .	502	Teli, . . .	8,393

A mixed race, known as Eurasians, are not numerous, only 9410, and there are representatives from the nations of Europe speaking twenty European languages. The 26 Asiatic tongues spoken are as under:—

Arabic.	Hebrew.	Persian.
Armenian.	Hindustani, 87,526.	Pushtu.
Assamese.	Khasi.	Santali.
Bengali, 417,234.	Madraasi.	Siamese.
Burmese.	Malay.	Singhalese.
Chinese.	Mahrati.	Tamil.
Cutchi.	Malabari.	Telugu.
Garro.	Malay.	Uriya, 15,151.
Gujerati.	Pangabi.	

with 20 European languages.

ASSAM has an area of 46,341 square miles, and a population of 4,881,426. It is in the extreme north-east of British India, being bounded on the north by the eastern section of the Himalaya mountains, which portion is inhabited by the Bhutia, Dafla, Aka, and other hill tribes. On its west and south lies Bengal proper, and on the east it has the feudatory Native State of Manipur and the wild regions of Upper Burma.

Assam is naturally divided into three portions, viz. the valley of the Brahmaputra on the north, that of the Surma on the south, and between these two valleys are mountain regions running east and west, which form the watershed of the two basins, and help, with numerous streams, to swell the waters of two of the largest rivers which at the present day form the chief means of communication. On the night of the census, there were 3899 boats on the rivers, with 20,301 persons on board. The people are thus distributed:—

Surma valley, . . .	2,268,434
Brahmaputra valley, . . .	2,249,185
Cachar Hill tracts, . . .	24,433
Garro . . .	85,635
Khasiya and Jaintia do., . . .	169,360
Naga Hills, . . .	1,380
„ „ tracts, . . .	93,000—373,807

There are 105·84 persons to the square mile; but there is much waste land; the density ranged from 9·91 per square mile in North Cachar Hills to 861·95 in Sylhet.

The *Brahmaputra* valley has been the scene of frequent revolutions, by which one tribe has succeeded to another, and each has left its traces on the character and physique of the present inhabitants, who have Ahom, Chutiya, Koch, Bodo, and Aryan blood largely in their veins. They are a proud, haughty, and indolent people, and have been inclined to use opium in excess.

Hindu missionaries are largely and actively engaged in proselytizing. The chief of the propaganda are Gosains from Nadya and Kanouj. A few of the Kamrûp Gosain marry, but those of Upper Assam are celibates of the Vaishnava sect, living in monasteries (shatra) with their temple in the centre, and the cells of their chief followers, to the number sometimes of several hundred, disposed in order around it. There are also some Kolita missionaries.

The Chutiya, Koch, and Rajbansi have accepted Hinduism. The Madhahi, Mahalia, Rabha, Sarania, Totila are semi-Hinduized; but the Garo, Hajong, Kachari, Lalung, and Mech remain in their own faiths.

The Kachari chiefly worship the Bathau or the Siju (Gharbura), a species of euphorbia (*E. antiqurum*). A plant of it is kept in every courtyard as their tutelary deity, called Siju-Gohain, and is carefully protected by a fence of split bamboo. Offerings are made of rice, eggs, chickens, and goats. Other of their deities are Mainau, who provides food and drink; Khober (? Kuvera), the god of wealth; Hasung Madai, the traveller's god; with Dalah, Gabang, Hagrani, Madai, sylvan deities; and Daini Madai, gods of the waters.

The Deori or Deoshi is their divine, who in sickness and peace makes offerings of salt, rice, pulse, eggs, chickens, pigeons, goats, pigs, to the wrathful deity, and works himself up into a state of hysteria.

Other tribes named are the Aka on the borders, the Kolita and Kaibarth in the valley.

The Muhammadans also are actively proselytizing, and their numbers are 1,317,022.

I. *Bodo Tribes, viz.—*

Chutiya,	60,232	Mahalia,	6,198
Garo,	23,373	Mech,	57,890
Hajong,	4,354	Mikir or Arleng,	77,765
Kachari Baraphisa,	281,611	Rabha,	56,499
Koch,	230,382	Rajbansi,	106,376
Lalung,	47,650	Sarania,	4,718
Madhahi, Kam- tali, Heremia,	13,159	Totila,	2,539

II. *Shan Tribes, viz.—*

Abor,	821	Khamti, Kamjang, Aitonia, Pani- Nora, Phakial,	2,883
Ahom,	179,314	Miri, 50 clans,	25,636
Borahi, Deori, Dalla,	549	Shan,	275

III. *Other Tribes.*

Bhutia,	1,340	Mishmi,	685
Kluasi,	104,830	Naga,	104,650
Kuki,	10,812	Nepalese,	3,991
Langam,	1,895	Santal,	7,397
Mulla,	1,239	Santeng,	47,815
Man,	282	Singpho,	1,774
Manipuri,	19,823	Tiperah,	3,984
Matak (Moran),	220		

Most of the other races in this province are represented in other parts of India.

On the Northern Assam frontier are found, in the following order from east to west, the Aka, Bor, Abor, Doffla, Miri, and Mishmi.

On the Southern Assam frontier we have the numerous Naga and Singpho dialects, the Mikir and Angami, the languages of the Khasya and Jaintia hillmen, the Boro in Cachar, and the Garo in the hills of that name.

Abor and Bor-Abor tribes occupy the hills between the Subansiri and Dihang rivers, and extend to the east. They are powerful tribes. The Abor have a Morang or town hall in each of their villages, which is occupied nightly by all the bachelors, and a proportion of all the married men; that at Membu was 200 feet long, and had 16 or 17 fireplaces. They call themselves Padam. The term Abor is said by Colonel Dalton to mean barbarous. It is applied particularly to the hill races on the southern slopes of that portion of the great Himalayan range between the Dihang and Subansiri rivers.

The *Manipur* State has an area of 8000 square miles, and a population numbering 221,070. It is a hill country, sparsely occupied, with 27 inhabitants to the square mile. The bulk of the Manipuri of the valley claiming a Kshatriya descent (130,892) have embraced Hinduism. The men are indolent, and leave the out-door work to the women and to slaves. The Koi are of slave descent. The hill tribes number 85,288. The non-Hindu tribes have about 300 deities to whom they sacrifice.

BOMBAY.—The Bombay Presidency of British India is under the rule of a Governor and Council, composed of natives of Great Britain, and for legislation there is a Council in which Europeans and natives of India assemble. These two bodies have jurisdiction over an area of 124,516 square miles, in provinces extending between lat. 13° 15' and 28° 12' N., and long. 66° 43' and 76° 28' E., and over the fortified promontory of Aden in Arabia, 1600 miles away to the west, in lat. 12° 45' N., and long. 45° 4' E. The physical features of the provinces in the area here indicated are of a widely different character, and they include portions of British territory mixed with several possessions of Indian princes.

British Territory.

	Area. Sq. m.	Popula- tion.		Area. sq. m.	Popula- tion.
Gujerat,	10,158	2,857,731	Bombay City and Island,	22	773,196
Konkan,	9,061	2,287,287			
Dekhan,	37,407	5,315,123	Total,	124,122	16,464,414
W. Canara,	18,860	2,807,254			
Sind,	48,014	2,413,823	Aden,	11·6	43,860

Feudatory States.

	Area.	Popula- tion.		Area.	Popula- tion.
Cutch,	6,500	512,084	Satara,		
Palanpur,	8,000	570,478	Jaghira,	3,314	818,687
Mahikanta,	11,049	517,485	Akalkot,	498	58,040
Kattyawar,	20,559	2,343,860	Kolhapur,	2,810	800,189
Rewakanta,	4,792	543,462	S. Mahratta		
Cambar,	350	66,074	Jaghira,	2,784	523,753
Narukot,	143	6,440	Savanur,	70	14,783
Surat,	1,220	77,633	Khairpur,	6,109	129,163
Jauhar,	634	48,550			
Junjira,	825	76,361	Tot. Feud.,	79,758	6,941,249
Sawantwari,	900	174,438	Tot. British,	124,122	16,464,414
The Dangs,	3,840	60,270	Grand Tot.	107,875	23,395,663

Bombay city, with its great population, is ou

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an island which has been joined to the mainland by means of a causeway.

The *Konkan* and North Canara districts are chiefly in the lowland between the ghats and the sea, with an ample rainfall of 100 inches. The seaboard has several small harbours, and the people are fishing and seafaring races. In the Northern Konkan, the country between the hills and the coast is a mass of low ranges, and cultivation is carried on on the steep slopes of the hills and in the intervening valleys. In the southern part of the Konkan, the hills approach the sea, leaving little room for agriculture, but there are many small harbours with fisher races.

Gujarat, with the valleys of the Sabarmati and the Mahi, and the lands in the lower course of the Tapti and Nerbadda, excepting in its east and north-east, is a flat country, with a good soil. Its rainfall, 37 inches, is scant. Its people, in their castes and occupations, differ more than in any other part of India. There are numerous aboriginal races, some of them landowners, some in a servile condition, with several aboriginal and forest tribes of whom there is no tradition. The area of Gujarat is 10,158 square miles, arranged into the five districts of Ahmadabad, Baroach, Kaira, Panch-Mahals, and Surat. The low-lying alluvial tract around the coast of Gujarat is occupied by Rajput tribes, and by Gujar, Kathi, Koli, and Kunbi. In its southern districts the most numerous of the aboriginal classes are the Chaudria, the Duria, and the Bhil of the Dang.

The *Dekhan* province is wholly on the table-land of the Peninsula plateau, 1500 to 1800 feet above the sea, and is occupied largely by the Mahratta race. It is covered with the regur or black cotton soil, of inexhaustible fertility, but in its eastern part the rainfall is always so scant and uncertain that the tract is known as the famine belt. Its districts are Ahmadnagpur, Kandesh, Nasik, Satara, Sholapur, and Poona, 37,081 square miles. Bombay Dekhan is the name applied only to all that part of the table-land stretching from the ghat range eastward to the Hyderabad and British possessions.

The *Karnatic* is partly above and partly below the ghats; the greater portion of it is included between the river Kistna and the Tumbadra. Its inhabitants speak the Canarese language, and irrigate with the aid of tanks. In its south-west corner there are valuable forests, and cultivation is carried on in patches interspersed with forest. It includes the revenue districts of Belgaum, Canara, Dharwar, and Kaladgi, 18,860 square miles.

Sind is in the valley and delta of the Indus. It is the most northerly portion of the Bombay Presidency, is a highly arid region, but is fairly cultivated by means of canals led from the Indus river. Its population is of a very mixed character, differing in race, in religion, and in customs and habits.

In this presidency are some of the largest towns of India—

Ahmadabad, . . .	124,000	Nadiad,	28,000
Ahmadnagpur, . .	39,000	Nasik,	24,000
Belgaum,	32,000	Poona,	129,662
Bijapur,	12,000	Satara,	29,000
Bombay,	773,196	Sholapur,	59,000
Baroach,	37,000	Surat,	107,000
Dhulia,	18,000		

Bombay city is a creation of the British people.

The island formed part of the dower of Catherine of Braganza, queen of Charles II., who in 1668 transferred it to the English E. I. Company, on an annual rent of £10. But from prehistoric times, people from the S.W. of Asia, of Egypt, and of Southern Europe have in succession been trafficking in territories which are now under the jurisdiction of this presidency. Besides the aboriginal races whose advent is unknown, this presidency has descendants of Kathi, Getæ, Parthians, and Huns from High Asia.

From the early years of the Christian era until the middle of the third century A.D., the Siuhs or Sah were ruling at Sehor; they were displaced by the Gupta, who in their turn fell before a native race ruling from Balabhi or Wullubhi, at the foot of the hills of Chamardee. In 770, Wullubhipur, the present Wulleh, fell to a foreign race. From this time parts of this region were held by the Chaura (746-942), by the Solunki Rajputs, and Mahmud of Ghazni (1024), Shahab-ud-Din (1174-1179), and Kutub-ud-Din (1194) harassed the northern parts. The Wagela dynasty was ruling in the 12th and 13th centuries; in A.D. 1297, Alif Khan, brother of Ala-ud-Din, suddenly appeared with a large force, defeated Kurun of the Wagela race, took Anhilwara, sacked Cambay, and destroyed Sidhpur and Somnath. Anhilwara had been to the west of India what Venice became to Europe; but in 1411 Ahmad Shah abandoned Anhilwara, and occupied as his capital Kuranawati, on the left bank of the Sabarmati. From that time till the opening years of the 19th century, the region has been an arena on which Delhi rulers, the Rajputs, the Portuguese, the Mahratta dynasties, the Asaf Jahi of Hyderabad, and the British have been striving for victory and dominion, each leaving some of its followers in the territories.

Its princes and chiefs in alliance with the British are about 363 in number. Their states have an area of 73,753 square miles, and a population of 6,941,249; and the region between Kandesh and Sind, a distance of 400 miles, nearly all belongs to feudatory rulers.

Bombay Native States.

	Area. Sq. m.	Popula- tion.		Area. Sq. m.	Popula- tion.
Kolhapur,	3,184	802,691	Sawantwari, . . .	900	190,814
Cutch (ex- clusive of the Runn), . . .	0,500	487,303	Janjira,	325	71,900
Mahikanta	4,000	447,056	S. Mahratta . . .		
Agency,	0,109	127,000	Jaghirs (8), . . .	2,734	610,434
Sind (Khair- pur),	20,338	2,312,629	Satara,	3,508	417,295
Kattyawar	8,000	502,582	Jaghira,	534	37,406
Agency,	4,972	505,732	Jauhar,	1,061	124,808
Palanpur,	350	83,404	Surat Agency, . .	70	6,837
Rewakanta, . . .			Savanur,	143	47,033
Cambay,			Narukot,		
			Kandesh		
			Dunge (23 Petty States)	3,840	89,111

Amongst these feudatories are their Highnesses the Gackwar of Baroda, the Rao of Cutch, the Jam of Navanagar, the Thakur of Murvi, the Jetwa Rana of Porebandar, the Gohil Rawul of Bhownagpur, the Jhala ruler of Hulwud-Drangdra, the Bhonsla raja of Kolhapur, the Nawabs of Cambay, Junaghar, Janjira, and Savanur, with many great families in the Southern Mahratta country whose ancestors held high offices under the Peshwa.

The 1881 census of the Hindust shows 716 castes in 11,438,083 persons. There are 147 subdivisions of the 650,880 Brahmans. The

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Wania or Banya, 391,288 in number, have 68 subdivisions. The Jains, who number 215,033 souls, have 81 sub-sections; and 1,133,927 Muhammadans are said to have 233 sections.

Main Castes, Bombay British Territory.

	British.	Feudatory.	Total.
Brahman,	664,411	346,787	1,011,198
Rajput,	196,906	252,688	449,594
Agria and Mithagria,	170,302	271	170,573
Berad (Beder),	118,335	23,428	141,763
Bhandari,	134,656	23,376	158,032
Chamar or Khalpa,	163,102	40,015	203,117
Dhangar,	472,167	118,393	590,560
Dubla,	106,332	2,723	109,055
Kunbi, Mahratta,	2,403,059	1,082,509	4,485,568
Kunbi, Lewa,	215,928	166,746	382,674
Kunbi, Kadwa,	100,365	59,252	159,617
Koli, Mahratta,	244,146	22,384	266,530
Koli, Talabda,	639,141	637,208	1,276,349
Koli, Konkani,	120,006	5,943	125,949
Koshti,	78,586	20,258	98,844
Potter (Kumhar),	124,405	...	...
Lingaet,	261,799	210,280	472,079
Lohana,	234,303	114,211	348,514
Mali,	252,141	25,258	277,399
Mhang,	161,970	32,703	194,673
Mhar,	852,623	345,207	1,197,730
Panchamsali,	288,875	2,371	291,346
Parit,	58,107	...	...
Reddi,	58,382	11,412	69,794
Goldsmith,	130,486	39,306	169,792
Teli and Ghanchi,	175,841	12,791	188,632
Wanjari (Brinjari),	105,885	2,474	108,359
Other Hindus,	2,346,332	...	...
Aborigines, viz. Bhil,	341,634	200,972	542,606
Forcasters, Thakur,	302	7,776	8,078
Warli,	8,397	54,787	63,184
Kathodi,	4,478	4,497	8,975
Other Aborigines,	207,867	101,184	309,051
Muhammadans,	3,021,131	753,329	3,774,460

Other castes, viz.—

Bhangi,	43,688	Kamathi,	11,153
Bharwad,	31,675	Karhadi Brahman,	23,040
Bhat,	15,067	Kayasth Parbhu,	13,666
Bhattia,	13,193	Kuttri,	30,968
Bhui,	48,398	Koli Chunwalia,	43,895
Burua,	10,199	Mach'hi,	29,996
Gaoli,	36,560	Panchali,	39,148
Gosai,	33,851	Ramusi,	43,037
Gujar,	31,817	Rabari,	22,810
Gujar wania,	32,693	Sadar,	44,317
Halepaik,	43,061	Sali,	40,081
Hat-gar,	16,246	Waghri,	32,051
Kabligr,	20,347		

The trading classes of the Bombay Presidency are the Bhattia, Gujar wania, Gujarati, Jain, Konkani wania, Lohana, Mahrati wania, Lingaet, Marwari wania. The Lohana are chiefly in Sind, with a small number in Gujarat. The home of the Bhattia is in Cutch, a few in Gujarat, and in some numbers in Bombay city. Wania is a general term applied to all traders, and there are Gujar traders from Gujarat. The Gujarati merchants are the most widely spread of all this trading class, and are styled Wania, Khedayada, Lad, Modh, Marwari, and Srimali. The Bhattia, Jain, and Parsee are keenly engaged in trade; as also are the Bohra, the Khoja and Mehman Muhammadans.

Agriculturists are Kunbi, Koli, Jangam, Agria, Bhandari, Dubla, Lingaet, Panchamsali, Halepaik, Raddi, Mali, Mahratta, and Sadar. The Kadava Kunbi are very particular as to their intermarriages. But when a suitable match for a girl cannot be found, she is married to a bunch of flowers, which are afterwards thrown into a well. She is then a widow, and can be married with the natra rites. Or she is married

to a married man, on the agreement that he divorce her on completion of the ceremony, and she can then be re-married by the natra ceremony.

Under the native governments, each of the village communities in the Dekhan had a portion of ground attached to it, under the control of the inhabitants. They were paid from different sources, in some from Meras lands, in others from Gairan or Gutkooli and Inam lands. In the Dekhan and Carnatic table-land, the offices of the headman and accountant, as also those of the minor members of the municipality, are hereditary; but in North Konkan and Gujarat, the appointments are by selection. The village system has a deep root among the Mahrattas.

In Kolaba, the village menial, he who watches the gates and preserves the boundary marks, is the chief. The usual members of the village staff are the sonar, kasar, sutar (carpenter), teli, darzi, lohar, kumhar (potter), chamar, muchhi, hajam (barber), parit (washerman), mhar, and mhang.

The *shepherd* races are the Bharwad, Brinjari, Dhangar, Gaoli, Gol, Gras, Kumbar, and Rabari.

The *seafaring* and *fisher* tribes are the Ambhi, Bhoi, Gabit, Kharwa, Mach'hi, Mangala, and Moger.

The chief *forest* tribes are returned as under:—

Forest.	Males.	Females.	Total.
Chodra,	17,276	17,189	34,465
Dhodia,	26,251	27,625	53,879
Gantha,	4,253	4,159	8,412
Nakala,	12,763	13,526	26,289

But besides there are the Bhil, Kathodi, Thakur, and Warli.

The *aborigines*, returned as numbering 562,678, are chiefly in the Panch Mahal district, where they form 30 per cent. of the population; in the Thar and Parkar they are 23 per cent.; in both Thana and Surat they form 19 per cent.; in Kandesh, 14·6 per cent.; in Nasik, 10; and in Baroach, 9 per cent. Of their total number, 561,317 are illiterate, viz. 284,507 illiterate males, and 276,810 illiterate females.

Famine, Rainfall.—The rainfall in the Dekhan districts, always scant, at uncertain intervals even fails, and dearths and famines result. About the year 1801, aggravated by wars, a severe famine occurred, and in 1877 another occurred, owing to another failure in the rains. In the latter year the famine area extended over nine districts in all. Three of these districts—Kandesh, Nasik, and Satara—showed some increase in 1881 on the population return of 1872; but the decrease in Ahmadnagpur was 3·48 per cent.; in Poona, 2·45 per cent.; in Sholapur, 19·02 per cent.; in Belgaum, 8·56 per cent.; in Dharwar, 10·78 per cent.; and in Kaladgi, 21·77. The natural growth of the population, had it not been for the famine, should have been about 8 per cent. on the population of 1872.

	1872.	1881.	Actual Decrease.
Ahmadnagpur,	778,337	751,228	27,109
Poona,	921,353	900,621	20,732
Sholapur,	719,375	582,487	136,888
Belgaum,	944,985	864,014	80,971
Dharwar,	989,671	882,907	106,764
Kaladgi,	816,273	638,493	177,780
	5,169,994	4,619,750	550,244

There was thus an actual decrease of 550,244 on the population of 1871, and a decrease of 963,843 on what the population should have been had it increased as in ordinary times.

The *Languages* current in this presidency are about forty in number, but the following sixteen cultivated tongues are the vernaculars of twenty-one out of the twenty-three millions which form the total of the population:—

Hindustani,	1,074,127	Gonnesse or Konkani, 46,742	
Mahratti,	9,286,608	Tamil,	8,971
Gujeratti,	7,535,100	Hindi,	20,274
Canarese,	498,234	Tulu,	595
Sindi,	2,095,703	African,	2,088
Marwari,	192,974	Turkish,	225
Baluchi,	151,326	Cutchi,	11,715
Arabic,	10,498	Panjabi,	24,301
Persian,	4,308	Pushtu,	8,925
Portuguese,	4,260	Telugu,	123,367

The other tongues spoken are Chinese, English, French, German, Somali, Spanish, Swedish, Bengali.

Religion.—The Hindus of the Bombay Presidency recognise themselves as worshippers at particular shrines, and the only prominent sects are the Walabha-Chariya, the Swami-Narayan, and the Lingaet.

The village deities are Kandi Rao or Kandoba, Venkoba, Vittoba, Ganpati, Hanuman, and Bhyroba. The Nag serpent and Hanuman images are in every village south to the Tumbudra. But the Mahratta are largely spirit-worshippers, and blood sacrifices are frequent. At Chinchor, near Poona, a Brahman family claim to be an incarnation of Ganesa. Krishna was accidentally killed near Pattun. His ashes are entombed there, and with the temples at Dwaraka are largely visited. The sun-worship continues there, and with it that of the lingam. The Jaina sect have the holy sites of Shatrūnji, near Palitana, Gorakhnath, Aka, Sita, Girnar, Gop-nath, etc. At Somnath or Sonaswara is a famed lingam temple, which was lately rebuilt by Ahalya Bai, widow of Holkar. The Parsee temples are chiefly at Bombay and Surat. They are mean structures compared with those of the Jaina sect, who delight in raising beautiful fanes for their sainted Tirthankar.

On the Girnar mount is the Bhairava J'hap rock, from which devotees were wont to throw themselves; and the rock on which Asoka's edicts are cut is at the entrance of the valley which leads to the base of the mountain, from the Junagarh side.

The *Brahmans* are largely of Aryan descent, and differ chiefly in their lineage from founders of families. They might therefore be supposed to incline towards assimilation. Yet the Gujerati Brahmans alone have eighty subdivisions.

The Brahmans of Maharashtra are Deshest or Dekhanist, Kokanist, Karhadé, and Deorukha.

Those of Gujerat are the Audich, Anāwala, Mewāda, Modh, and Nagar.

The Gaur Brahmans are the Saraswat, Sashtekar, Shenvi, and Kanaujia (Kanyakubja).

The Havik are Canara Brahmans, and cultivate.

Deshest or Dekhani Brahmans include mostly those of the table-land in the Dekhan and Canara above the ghats. The Matrayani and Madhyandini are of Kandesh and Nasik, and the Palacé Brahmans of N. Konkan.

The Konkaniist Brahman, also called Chitpawan,

who rose to fame in the times of the Peshwas, mostly belong to the Konkan and Poona. They are a highly intellectual race.

Jain religionists are proportionally numerous in Cutch, in the northern states of Gujerat, particularly in Ahmadabad. In Kolhapur and the Southern Mahratta country, many of the peasantry belong to this sect. The sect have about eighty subdivisions. The Oswal or Humbad, the Porwal and Shrimali are the chief. Jain husbands in Gujerat marry into Hindu families. The Hindu wife, while in her husband's home, conforms to his ritual; but on the many occasions on which she revisits her father's family, she reverts to the rites of her ancestors.

The *Muhammadans* number 3,021,112. They are known as the Shaikh, Sayyid, Pathan, and Moghul; but in their religions they are of Sunni and Shiah sects. The Sunni are followers of the four commentators of the Koran, Hanafi, Shafai, Hanbali, and Maliki. There are several Shiah sects, the more prominent of its branches being the Khoja, Bohra, and Mehman. One section of the Khoja follows the representative of Haseen-us-Salibah, the Shaikh-ul-Jalal or Old Man of the Mountain of the times of the Crusaders, whom they regard as an incarnation of Ali. About A.D. 1480, a large body of Hindus of Cutch adopted this religion. Their leader, Aga Ali Shah, resides in Bombay, and succeeded his father, Aga Khan, a claimant for the Persian throne, who, after being driven from Persia, was long a Bombay resident.

The *Bohra* are a numerous, widespread, and wealthy sect. Their chief apostle, Dai or Mallah, resides in Surat. He names his successor. Those of Ahmadabad are of the Sunni sect.

The Shiah Bohra of Surat, those trading in Bombay, and a few others, are highly trained in the vernacular language of their own locality, and also in Urdu and Arabic.

The *Mehman* are cultivators, shopkeepers, artisans. They are believed to be converts from Hinduism. They are distributed through the Kurachee district.

In Sind, the Malik and the Mol Islam are other divisions, and in Aden are the Imamy and Zaidiya.

Fakirs are Muhammadan devotees; among them the fakir or darvesh belong to several schools, the Azad, Barawa, Chishti, Iraq, Rafai, Jalalia, Kadar, Kalandaria, and Madaria. The founder of the last-mentioned school, Shah Madar, lived in Makhanpur, 60 miles from Lucknow. The Kadar take their name from Abdul Kadar, Jalani, of Baghdad; Jalal Bokhari of Bahawalpur founded the Jalalia, and the Azad are a section of the Jalalia, and are celibates; and the Kalandari claim as their founder Bu Ali Kalandar, whose tomb is held in great reverence.

More than 60 per cent. of the Muhammadans reside in Sind. The Muhammadans are largely converts from some of the Hindu tribes, and descendants of immigrants from the adjoining districts of Baluchistan, Afghanistan, the Panjab, and the Indian desert.

The *Parsees* are a prominent, though not a numerous body of the population. They have separated, on very unimportant points, into two sects, one of these, the Kadimi, or old firm, reckon by the old Persian era, which is a month earlier

than that used by the Shahanshah¹, Shensoi, or Rasmi, who form 92 per cent. of the sect.

The *Jews* take a humble position, largely artisans, masons, carpenters. They came from the Persian Gulf or Arabia in the 15th or 16th century. They call themselves Ban-i-Israel.

The *homeless broken tribes* and predatory sections of the Dekhan population have received much attention from several writers.

In 1843, the Editor furnished to Jameson's Edinburgh Journal notices of the homeless tribes of the Southern Mahratta country. In 1852, Captain Harvey, of the Bombay police, described seventy-one races wandering in that presidency; and in the following year, Major Douglas Graham enumerated thirty-eight of the moving communities in the Kolhapur territory, additional to those described by Captain Harvey. Little more than the names of these can find room here.

The *Beder* extend along the western part of the Dekhan plateau in all its extent, from the Tapti to Mysore. The Beder attained their highest power about the 16th century. Harponhully, in the Bellary district, was founded by two brothers, one of whom married a daughter of the Polygar chief of Chittuldrug. In A.D. 1517, Raidrug was given to a Buder chief who built the present fort. There are now two Beder chiefships, Zorapur and Gurgunta, to the south of Sholapur. Until early in the 19th century, the Beder in the Southern Mahratta country were under a Naik, who held the fortified village of Chikuldini, at the foot of the western hills; they were eminently predatory, tillage extending no farther than around their houses. They are a simple-mannered race, civil and good-humoured, and communicative, but very poor. The ancestor of the Zorapur chief aided Aurangzeb in the siege of Bijapur, for which he was rewarded with the title of raja, and was made a mansabdar of 5000. They number 118,335 in the Bombay Presidency, and in all India 171,269 is the return. The Berad, 263,896.

The *Bhaori*, or Hirn Shikari, or Hirn Pardi, are a migratory race of fowlers and hunters, who are to be seen in most parts of the Peninsula. They snare game and wild animals of all kinds, jackals, foxes, wolves, leopards, tigers. They are of short stature, black and shrivelled, greatly wanting in intelligence, and timid in their intercourse with people in the towns to which they bring their captures for sale. The women earn a little by selling antidotes for snake-bites and scorpion stings,—simple roots and parts of the animals they kill; and the jackal's horn, a projecting part of the frontal bone, is eagerly purchased from them as a charm against the evil eye. They are in all parts of India, but chiefly in Marwar. They have several tribes, Rathor, Mewar, Chauhan, Sawandia, Korbiar, and Kodiara. They dwell in distinct hunting-grounds, generally with rivers as boundaries, and have hereditary chiefs, termed Haulia, who assemble the tribe on occasions. One portion of the reward for capturing tigers is allotted to the river deity; the forest deity has another. They are wretchedly poor, with a few rags for clothing, but they steal from fields and grain-pits; and the settled population think they are wealthy. When the beard first appears, it and the hair of the head is cut once annually, for five successive years, but afterwards it is left unshorn. Their girls are married about the time they grow

up; the rejoicings last five days, during which the couple, smeared with turmeric, remain seated on the ground. They bury their dead.

The *Bhatoo*, Doomur, or Khelati are a wandering race of acrobats, who arrange themselves into twelve sections, and move about in the districts of Aurangabad and Ahmadnaggur southwards to Hurrihur in Mysore. The men seldom exceed five feet in height, and the women proportionally smaller. At the period of adolescence, the young men and women are perfect models for the sculptor. Besides performing as athletes, the men exorcise demons from those possessed, and the young women are devoted to the gods, Kandoba at Chinchor, near Poona, being usually resorted to. When the girl is about five years old they lay her at the feet of the deity, and she becomes a Mürli devotee. Most of their feats consist of leaping over or climbing up a bamboo. They sustain severe injuries; an old man of 60 years of age recollected having actually seen four people killed, and innumerable injuries of others, by falls from the bamboo. His own right elbow-joint had been crushed. They usually take a partner from amongst the devoted women, who have grown too old to perform. They profess to worship Narayan, but the bamboo with which they perform is the chief object of their adoration; when cut down they have it consecrated, and term it Gunnichari or chief, and in their assemblies or Panchaits it is erected in their midst. They have no other idols, but they visit the shrines of Ellama, Tulsidas, Bhawani, Dawal Malik Peer, and Nursoba. They bury their dead, place food at the head of the grave, and draw favourable omens.

The *Bhattia* and *Banya* of Mandavi and other parts of Cutch have been trading since many centuries in Africa and Arabia, and were largely engaged in the African slave trade. The *sailors* of Mandavi are bold and skilful, and their pilots famed for their skill and daring.

The *Bhil* of Ajmir, Central Provinces, Hyderabad, and Rajputana number 141,972; and in the Bombay Presidency 341,634, chiefly in Kandah, Panch Mahal, Nasik, Thur and Parkar, and Ahmadnaggur. In the western districts they are known as the Kale Puruj (black men), also as the Dubla (slender). North of the Nerbadda, in the Bhil marriages, the groom takes the bride on his shoulder and dances round a fire; it is called the Ghora-natch. Bhil clans are in a state of great moral transition. They were bold plunderers, their national weapon the bow. Those located between the Tapti and the Satpura Hills are known as the Wah-wih or Wa-sa-weh. The Bhil worship the image of a horse, named Baba Deo Ghora.

The *Bhoi*, fishers, palanquin-bearers, and seamen, extend across the Peninsula from Bengal to Bombay, wedged in between Aryan and Kolarian races in their north, and Gond, Teling, Mahratta races in the south. Mr. Plowden supposes them to be the Besta of Madras, 367,904; states 11,019 are in Berar, and 46,134 in Hyderabad, but does not mention the 48,898 whom Mr. Baines returns from Bombay.

The *Chamar*, 163,102 souls, are tanners, curriers, and shoemakers. Their name is derived from the Hindi word for leather. The Chamar are known as the Sultungar, Huralbukht, Dubali, Woji, Chour,

Paradosh. The Sultungar dye and sell sheep-skins; the Paradosh work in tent-making, etc. The higher rank Chamar make shoes; the Huralbukht dye skins red, and make shoes; the Dubali, Woji, and Chour make bridles, pakhals, water-bags, and eat animals that have died of disease.

The *Dubali* section of the Chamar are 10,224 according to the 1871 census, but the memorandum placed before Parliament showed 73,000 Dubali in the Surat district.

Dohor or *Dhor*, *Kutai*, or *Duphgar*, dye skins of horned cattle, and are leather-workers, make pakhals, mot or well buckets, dol or hand buckets; the *Kutai* are cobblers, tent-workers, and eat diseased animals, as also do the *Duphgar*, who make leather oil bottles.

The Chamar of Bombay reckon as sections, the Chour, Dubali, Huralbukht, Paradosh, Sultungar, and Woji. They are all tanners, curriers, shoemakers, and saddlers, and all of them eat animals that have died of disease.

The *Dher* are the great labouring class of the Dekhan, and seem to have been its first proprietors. They were returned in 1881 as 110,010, and the *Mhar* and *Dher* 1,197,730, and these two are supposed to be identical. In physical appearance *Dher*, *Mhar*, *Mala*, *Parayan*, *Chandal*, *Kahar*, and *Holar* are identical, and number in all India 10,069,739.

Gujar.—Dekhan people designate as Gujar all persons from Gujarat. The Duria race of Gujarat make their temples of cotton trees, around which they raise upright stones in rows or in circles.

The women of the Chaudria race of Gujarat dispose immense strings of cowries around their head and neck. They are dreaded as witches, and in 1836 numbers of them were to be seen deprived of their noses as a prevention of witchcraft.

Jharija, a Rajput clan ruling in Cutch, are spread through Cutch, Gujarat, and Kattyawar. They have until recently been largely given to infanticide. They get wives from the daughters of the Jhala, Wagel, Sodha, and Gohil Rajputs. In 1818, Captain McMurdo estimated the numbers of the Jharija in Cutch at 12,000 persons, of whom only 30 were women. They killed girls to avoid paying for them heavy marriage portions. In the Bombay Feudatory States, the females were 120,357 to 132,331 males. In British provinces, 93,722 to 103,184 males. The Rao of Cutch, the Jam of Navanagar, and Thakur of Murvi are Jharija, and it was the Murvi chief who, in Colonel Walker's time, 1818, was the first to discontinue infanticide.

Kaikari, **HIND.**, **MAHR.**, **TAM.**, **TEL.**, **Kaikadi**, are makers of baskets from stems of cotton plants and palm leaves, but are all predatory.

Kattyawar people consist of Ahir, Koli, Kunbi, Lohana, Mher, Mehman, Rajputs, Rebari, and numerous Muhammadan tribes from Sind, Makran, Baluchistan, Arabia, Miana from Cutch, Badhel, Wagher of Okamundel and Sindi called Bawur. The Wagher of Dwaraka with the Badhail of Aramra were long the terror of these seas. In 1803, 1858, and 1859 they repulsed British troops, but in 1868 (8th May) the place was stormed, and their chief fell.

Kattyawar Babria, a peasant tribe, give their name to the Babria district.

The *Koli*, 2,219,540, are scattered from Raj-

putana to the southern part of the Mahratta country:

Mahratta,	881,014	Barar,	30,398
Ajmir,	260	Hyderabad,	213,966
Baroda,	429,688		

Koli are spread from the Thur and neighbourhood of Sind to Goa, and eastward to the Bhima. The *Koli* of Gujarat, up to the early part of the 19th century, were a restless, turbulent race, despising agriculture, and living by plunder. Their chiefs were Rahtor, Chauhan, Mukwana, etc., Rajputs who intermarried with the aborigines. The *Dubla Koli*, up to 1836, were mostly hereditary slaves. One proprietor in S. Gujarat had 300 of them. Their owners employed them in fishing and husbandry, and hired them out. The *Dubla* are now chiefly in the Broach and Surat districts, and in the latter district were largely Hali or predial slaves, hereditary serfs to families of colonizing Brahmans of the Anawala section. They are a little higher than the *Dhodia* in the social scale.

Kayasth, the great scribe and writing class of all India, 2,159,813. More than half the writers of Bombay claim to be Kayasths.

The **Maddikpor**, as they call themselves, are a migratory race in the Southern Mahratta country, who are known to the people as the *Kili Kyuntur*, the *Kotabu*. They are in general tall, well-made men, of an olive-yellow colour. They arrange themselves into ten branches,—*Avoti*, *Atok*, *Naknar*, *Pachungya Ram*, *Sinda*, *Sarwar*, *Saskene*, *Mohrkar*, *Sengan*, and *Durwia*,—and claim to be allied to the *Koli* or *Barkar*. They are beggars and fishers; their women earn a little by tattooing the foreheads of Hindu women, from which the tribe are called *Putchu*, and by knitting; but the chief occupation of the men consists in exhibiting transparencies painted on deerskin in bright colours, representing the story of the *Mahabharata*, which they relate to admiring crowds. They have also dancing puppets. They dwell in closely-woven grass huts. Every morning they worship the transparencies. The bamboo box is placed on a spot freshly covered with cow-dung, the lid is opened, and a prayer made for daily food. They are not restricted to one wife. They catch fish.

Mhang (161,970) of Kolhapur were long notorious for their wild, untameable habits, their great cunning, hardness, and predilection for outrage and robbery. They have been known to refuse an offer for their daughter's hand because the young man was not an expert thief. They are illiterate, and make as their mark the figure of a knife. Many of their young women were devoted to the deity *Kandoba* as *Murli*, or attached as *Jogini* to the goddess *Yellama*, and on the 3d of *Mangh-wud* (February) they were accustomed to parade the streets in a state of nudity in honour of the goddess. Their tutelary deity is *Jagadamba*.

The *Mhar* and the *Dher* (852,523) of the Bombay Dekhan, the *Parvuri* race of the lands below the ghats, the *Holar* of the Canarese-speaking district, the *Chandal* of Bengal, the *Pariah* of the Tamil country, the *Kahar* and the *Mala* of the Teling nation, assimilate in physical appearance. The *Dher* is the great labouring class of the Bombay Dekhan, and seem to have been its first owners. The numbers returned of these races are 10,069,739, viz. :—

Mhar,	1,434,446	Chandal,	1,719,608
Dher,	110,040	Kahar,	1,840,856
Dher and Mhar, 1,147,730		Holar,	447,421
Parayan,	3,200,038		

None of all these have accepted Brahmanism, but adhere to shamanist rites. They reside outside the villages, are labourers, weaving in the intervals of agricultural operations, are village servants and watchmen. They have several sections, and the Wusydong Mhar, the Tilwun, Wun, and Aduwun claim to have come from near Benares, and to be descended from a race whom they call Dong. They are nearly all illiterate.

The *Miana* of Mallia in Mucha Kanta, on the banks of the Muchu river, have a Thakur, but own allegiance only to their own Chowhattia or heads of tribes. They are of a turbulent disposition.

Murli.—Several of the Indian races, the Dhangar, Dher, Mhang, Koli, Mhar, and Manurwara, and occasionally even the higher Hindu castes, under various vows, devote their girls to the gods. The deity to whom the girl is more frequently vowed, is some incarnation of Siva or his consort. Amongst the Mahratta people on the western side of India, Kandoba is the usual Siva avatar to whom the girls are devoted, and his chief shrines are at Jejuri, Khanapur near Beder, and at Malligaon; but other deities, or even a dagger, are objects for their vows. The ordinary people believe that from time to time the shadow of the god comes on the devotee (deo ki chaya ati, ang par), and possesses the devotee's person (Murli ke ang ko bhar deti). These devotees are called Murli in Mahrati, Jogini or Jognidani in Canarese, and Basava in Telugu. They at times affect to be or really are possessed, during which they rock the body, and people occasionally make offerings to them as to an oracle or soothsayer, laying money at their feet, and await the possessing to hear a decision enunciated. The female deity to whom those near the Bhima river are devoted, is Yellama; the Bhuili race devote their Murli to Mata. Boys also are devoted, and styled Waghia, from Wag, a tiger. Near Amraoti it is to Amba and to Kandoba that the Murli and the Waghia are devoted. The Waghia does not associate with the Murli. At Amraoti, the people say that Kandoba moves on Sunday particularly, and selects a clean tree (clean Murli), whose body he fills.

Paggi of Gujarat must not be omitted. Their skill in tracking footmarks has acquired for them great fame.

The **Ramusi**, 43,037, are found in all the districts westward from Telingana to the edge of the Western Ghata. They call themselves Boyill or Boiggia. They claim to have three sections, as under:—

1. Bhaka.	2. Holga.
a. Chauhan.	c. Roray.
b. Jadu.	d. Gurgul.
	3. Behdar.

Though they have adopted Mahrati, they preserve a few words of their original Telugu for purposes of crime.

The **Ramusi** have continued predatory for about 500 years. When Ala-ud-Din Husain Gangui Bahmani (A.D. 1347–1358), heading the revolted troops of the empire, assumed sovereignty, and made war on the Hindu countries that encircled the kingdom of Kulburga, the **Ramusi** seem to

have been detached from the Teling nation, and to have at first settled among the fertile valleys of Maharashtra around Kuttow, Musawur, Mal-loura, Nalgund, the hill fort of Maimanghar in Mandesh, and east of Satara and the town of Phulton, and now they are found scattered from Hyderabad westwards; and the valleys of the Maun, Neera, Bhima, and Peera rivers, with the hills and plains in the vicinity, the districts of Satara, Poona, and Ahmadnaggur, give shelter to their descendants, who are thus scattered through a region lying between lat. 17° and 20° N., and long. 73° 40' and 75° 40' E. But in this wide extent 40,000 is perhaps the utmost number of their people. They are generally ill-favoured, but not dark coloured, short statured, but muscular and capable of untiring labour. The women are even more ill-favoured than the men, but are active and hardy, are very much attached to their children, and are strictly virtuous. They are pantheistic, but their favourite deity is Kandoba or Kandi Rao, named also Martinda, to whom, as also to Bhawani and Rama, they made their vows on their plundering expeditions.

The **Bakha** **Ramusi** are hardy, active, and enterprising, covetous, rapacious, and treacherous. From the time of Sivaji they plundered and were the ready instruments of rebellion, and successive rulers retaliated by massacring them on every opportunity. They were finally put down in 1832 by the British, when their leader Oomiah was hanged on the 3d February. During the unquiet times of the Mahratta rule between 1790 and 1818, they had gained head, and kept the country disturbed. They have now settled down to husbandry, and some of them are employed as watchmen, an office which in several towns is hereditary, the Rakhwala being one of the municipality. The Holga branch arrange themselves in 13 sections; their language is nearly Canarese. Though not hereditary robbers, many of them are decoits, highwaymen, and burglars, and often commit murder when engaged in robbery. They are part of the commune, as village watchmen, with shares of the village fees, and some are cultivators. In olden times they undertook to track up all robbers, and if they failed they had to make good half the value of the property plundered.

HYDERABAD is a principality in the centre of the plateau of Peninsular India. It is ruled over by a Muhammadan sovereign, whose ancestral title, Nizam of the Dekhan, was bestowed on the founder of the family by the emperor of Delhi, but the dynasty is known as the Asaf Jahi. The territory has been gathered under one sway from portions of four great nationalities,—Telingana in the east, Karnatica in the south, Maharashtra in the N.W., and Gondwana in the N.E., all of them peopled by non-Aryan races, amongst whom are some Aryans, with Muhammadans, and many fragments of broken, homeless, wandering tribes. The area is 81,807 square miles, and its population 9,845,594, being 120 to the square mile, the great bulk of them professing some form of Hinduism.

Hindu,	8,893,181	Jain,	8,521
Muhammadan,	925,970	Parsee,	638
Christian,	13,614	Jew,	47
Sikh,	3,664		

The dominion has been formed only since the

middle of the 18th century, and there is not yet any approach to a fusion of the masses into one nation, the rulers and their officers and their army being all alike foreigners. There has never yet been any Teling, Mahratta, or Canarese who has been placed in a high office of the State, although 85 per cent. of the population belong to these three races. The existing position of the races will be seen from the languages now spoken:—

Telugu,	4,279,108	Panjabi,	2,126
Mahrati,	3,147,746	Pushtu,	1,041
Canarese,	1,238,519	Persian,	319
Hindustani,	998,241	Bengali,	65
Hindi,	58,268	Uriya,	64
Marwari,	40,064	Baluchi,	36
Gondi,	38,224	Turki,	20
Tamil,	16,310	Chenchu,	17
Arabic,	6,959	Kashmiri,	3
Gujerati,	5,987	Others,	473
Kaikari,	5,294		

Since 1784, an ambassador, styled a Resident, has been to this court, but they have been frequently changed; from 1784 to 1797 inclusive, there were 4; 1805 to 1853, 17; and 1856 to 1881, 15.

Since the middle of the 19th century, the Berar portion of the Nizam's dominions of 17,711 square miles has been assigned to the British, in order to provide from its revenues funds for the pay of the Hyderabad contingent of artillery, cavalry, and infantry, which the Hyderabad State by treaty enrol for mutual defence. A census has been taken in 1881 of each of these two portions of the Hyderabad territory, but only that for Berar is to hand. Mr. Plowden, however, in his general report for all India, has given the following as the castes and races of the Hyderabad part:—

Aliir,	3,904	Kumbi,	1,658,665
Banya,	392,184	Kayaath,	3,427
Bhoi,	92,170	Kumhar,	90,835
Beder,	121,803	Kahar,	391
Banjari,	108,644	Kori,	130
Bhat,	6,630	Koli,	213,966
Bhandari,	356	Mali,	83,806
Bhil,	8,470	Matraj,	104,671
Brahmans,	259,147	Mhar,	806,653
Chamar,	447,312	Mhang,	315,732
Kalal,	233,201	Muhammadans,	925,929
Khatik or Kessab,	9,384	Patit,	162,062
Khatiri,	11,200	Pawar,	5
Munurwar,	187,458	Teli,	67,564
Koshti,	79,142	Sale,	185,008
Dhangar,	482,035	Teling,	327,338
Gawali,	223	Sonar,	88,769
Gond,	39,513	Reddi,	32,014
Gujar,	562	Komati,	194,284
Golla,	212,608	Mahrati,	369,636
Jat,	278	Jingnet,	97,836
Kach'hi,	537	Vellalar,	188
Khatik,	9,384		

The Gadarla, Jogi, Kamma, Pasi, and Uriya make an additional number.

On the boundary line in the middle course of the Tumbudra and the Kistna rivers, and in the valleys of their affluents, the Bhima, the Gatturba, and Malpurba, are several chiefs meriting notice. Until the year 1839, a family of Pathan Muhammadans ruled at Kurnool on the right bank of the Tumbudra, with the title of Nawab. In that neighbourhood a Syud family still rule as nawabs of Banaganapilly. Farther west are the Reddi chief of Gadwal, the Mahratta chief of Sundur, one of the Ghorpura family; the Kshatriya raja Narapati of Anagunda, claiming to be

a descendant of the great king Rama of Vijayanagar, who was overthrown by the combined armies of the four Muhammadan kingdoms of Golconda, Kulburga, Bijapur, and Ahmadnagpur; the Pathan nawab of Shahnur, the Ghorpura chiefs of Gujundargarh and Akalkot, and at Gurgunta and Beder Sorapur are descendants of that Beder soldier Pid-Naek, to whom Aurangzeb, for aid given at the siege of Bijapur, granted a small territory in the Raipur Doab, and who are now feudatories of the Hyderabad Government. The Beder of Sorapur drink spirits, eat the hog, crocodile, porcupine (sarsal), manis (uli), iguana (ghorpara), cow, buffalo, cat, rat, bandicoot (Mus gigantea), and jerboa rat. Eminently predatory, they gave their name to the Pindara who for nearly a century kept all India in commotion, and in the mutiny and rebellion of 1857 the Beder of Sorapur rose, but were suppressed, and their chief, sentenced to transportation, destroyed himself en route. The descendants of Pid-Naek are tall, handsome, fair men, fond of the chase, hunting the wild boar with powerful dogs. The town of Sorapur is in the centre of a rocky amphitheatre, admirably suited for the location of a predatory band.

The *Muhammadans* of Hyderabad are not cultivators, but several of them have State revenues in jaghir. Of those in Berar, only 1296 are professional. The Syuds of Kulburga, Gogi, and Hyderabad seem impoverished; those of Pathan, Moghul, Arab, Persian, and Habshi origin all prefer military employ, and rarely take to the plough. Before and after the fall of the great Hindu kingdom of Vijayanagar, several Muhammadan dynasties had ruled in parts of the lands now forming the Hyderabad territories, amongst others, the Nizam Shahi of Ahmadnagpur, the Adal Shahi of Bijapur, the Bahmani dynasty of Kulburga, the Imad Shahi of Ellichpur, the Kutub Shahi of Golconda, and the Asaf Jahi, who are now ruling, and the greater part of the Muhammadans are now to be found in the cities which since the 14th century have formed the capitals of these rulers. They may be about 7 per cent. of the population.

Goolar or *Baid*, about 2000 in number, are dwelling in the villages between Hyderabad and Poona, but a very considerable number reside in Seroor, 10 miles from Kulburga, and near Hiraphool, and between Kulburga and the Bhima. They call themselves 'Gol,' also Hanam-Gol, from Go, cow, and claim to be of the cowherd race. The people, however, designate them Adavi Goolar and Gaddha Goolar, that is, country or wild Goolar and donkey Goolar. The Adavi Goolar are also designated Bai-Mandel-Wanlu, also Dowai-Darman, also Dowa-Denc-Wale, because the men are travelling herbalists, collecting medicinal roots and plants for the native physicians. They are poor, and the young people and the women beg. Their physical appearance and colour are strikingly similar to those of the Rajputs, only they are not so tall, and are more slender. They have no resemblance to any other of the races in Southern India. They do not eat the cow or bullock, but use the goat, sheep, hare, and other creatures; like the Beder, they eat the crocodile. They do not intermarry with the Gaddha Goolar. The latter dwell in the outskirts of towns and villages; the men wear beards, and rear dogs and asses;

they hunt for wild animals, and eat the jackal, the crocodile, the porcupine, and the iguana. They are goatherds, and the women beg.

The *Goorao*, the *Vidur*, and the *Krishna pakshi* are offspring of Brahmans and women of the lower castes. Some of the *Goorao* are employed in temples, others are clerks.

BERAR has an area of 17,711 square miles, with a population of 2,672,673, being 151 to the square mile; the females are 88,311 fewer than the males. It is also designated the Hyderabad Assigned Districts, and is administered by the Indian Government, arranged for revenue purposes into the six districts of Amraoti, Akola, Basim, Ellichpur, Buldana, and Wun. A considerable portion of its eastern districts belonged to Gondwana, and there are still there many small broken tribes of that race; but since the latter years of the 15th century, it has had a succession of Muhammadan and Mahratta rulers, the Inad Shahi of Ellichpur, Nizam Shahi of Ahmadnagpur, the Delhi emperors, the peshwas of the Mahrattas, the Azof Jahi of Hyderabad, and now the British.

How the followers and the agricultural tribes of the surrounding nations have taken advantage of these changes to occupy the arable lands, will be seen from the current languages, viz.—

Mahrati,	2,207,514	English,	571
Hindustani,	302,601	Punjabi,	189
Gondi,	73,341	Pushtu,	90
Telugu,	39,435	Arabic,	35
Korku,	29,039	Sindi,	14
Gujerati,	17,043	Bengali,	13
Kaikari,	1,496	Persian, Baluch,	
Cannese,	1,487	German, French,	
Tamil,	792	Chinese,	10

Out of the whole number of inhabitants, there are only 73,344 speaking Gondi and 29,039 of the allied Korku, the others are foreigners.

In 1881 the more important of the trades, tribes, castes, and sects were as under:—

Banjari,	27,495	Koli,	30,398
Berad,	330	Komati,	5,430
Bhat,	2,520	Kori,	68
Bhoi-Besta,	22,961	Koahiti,	14,785
Brahmans,	65,754	Kumbar,	20,066
Chamar,	26,885	Kunbi,	834,174
Dhangar,	74,559	Lingaet,	9,859
Gnoli,	30,159	Lodhi,	1,773
Gujar,	967	Mali,	195,981
Jain,	6,329	Mhang,	46,366
Jat,	89	Mhar,	307,994
Jogi or Nat'h,	9,113	Pasi,	256
Kahar,	247	Rajputs,	44,133
Kalal,	14,943	Salé,	9,126
Khatik,	4,487	Sonar,	27,548
Khatiri,	2,015	Teli,	75,552

The chief aborigines of Berar are 164,941, as under:—

Andh,	37,010	Korku,	28,450
Arakh,	371	Lajhar,	1,824
Balai,	803	Moghi,	344
Bhil,	5,308	Nihal,	2,483
Gond,	64,817	Pardhan,	11,628
Kollam,	12,163	Banjara,	297
Kolabhaté,	43		

Ahir.—Berar is the most southerly part of British India in which this designation is found; even the Gaola race may be said to cease here, although in Hyderabad there are a small number of Gaola who keep cows and buffaloes; but the Dhangar, being the shepherd race, occupy the central Dekhan as herdsmen, and farther south the Kurubar, shepherds, from Kuru, a sheep.

The Ahir, before the Christian era, were in the N.W. frontier of India, from which they passed to Lower Sind and on to Gujerat. When the Kathi arrived in Gujerat in the 8th century, they found the Ahir there, and part of the Ahir had advanced to the east, and into Kandesh. An inscription in one of the Nasik Buddhist caves shows that early in the 5th century that country was under an Ahir king; and in the Puranic geography, the region from the Tapti to Deogarh was called Abhira, or the country of herdsmen. The Ahirs held dominion over the wild tracts of Gondwana, parts of Kandesh and Berar, and possessed the fortresses of Asirgarh, Gawilgarh, and Narnala; and in the 12th and 13th century they were rulers of Deogiri or Dowlatabad. Those of them who moved towards the Wain-Ganga have become Gawari, and in the Mailghat they are the Gaolan.

In Berar, the *Dhangar* sheep farmer race are of two sections, the Kota Pullia Dhangar, who keep sheep, and the Barji Hatkar, or 'shepherds with the spear.' The latter still hold much land on the borders of the Nizam's territory, and, until the British domination, were notorious for pugnacity and rebellion; they even still continue a quarrelsome and obstinate race. They are supposed to have come from Hindustan in twelve tribes, and been impelled by the Gonds towards Hingoli and Basim, which locality got the name of Barah Hatia, or the twelve tribes. They are found from Basim, on the north of Hingoli, into East Berar, where they occupy the hills on the north bank of the Pain-Ganga. The Hatkar are fine, able-bodied men, independent but arrogant; many of them never shave or cut the hair of their face.

The *Hatkar* arrange themselves into the Poli, Gurdi, and Muski clans, all of whom eat with the Kunbi. They burn the dead who die in battle or in the chase, but inter those who die of disease, seating the body cross-legged, with a small piece of gold in its mouth.

Gaoli have been settled from time immemorial along the Satpura range, and once were dominant in the hill country around Baitul.

The *Bhil* of Berar occupy the eastern slopes of the Gawilgarh range to its western extremity, and stretch far westwards into Kandesh. They belong to the Turvi clan; all now are Muhammadans. Those who live along the outskirts of the Satpura have embraced Muhammadanism. All along the Gawilgarh skirts, the Kurku, the Gond, and the Bhil have settled down to agriculture wherever the country has been cleared, and are now honest, peaceful, and inoffensive.

Gharpagari, of the Amraoti district, profess to have power to prevent the fall of hailstones on a field.

Mailghat is a strip of country along the course of the Wardha river, occupied by the Raj Gond races, the Agarmunde, Bhoya, Pardhan or Bard, Ballai, and Nihal; also by the Mugi, who are fishers and fowlers.

Gond occupy the Mailghat and the southern skirts of its hills, extend in the north-east into Sirguja; they are found along with the Khand and Urya in Karal and Kalahandi or Kharond; in the south they form the mass of the population in Bastar, form part of the population of Jeypore, and occupy the hills along the left bank

of the Godavery about Nirmul, and on the west are intermingled with other inhabitants of Berar for 30 miles from the right bank of the Wardha. Gond is spoken by 1,079,565 of people:—

Bengal,	1,294	Hyderabad, . . .	38,224
Berar,	72,344	N.W. Provinces, . .	201
Central Provinces, .	967,502		

Andh, along with the *Gond*, the *Korku*, and the *Kolamb*, inhabit the Mailghat and the southern skirts of the hills. These four tribes each speak a separate language, but resemble each other in their physical appearance, and all have features quite distinct from the inhabitants of the villages. They reside also in the Maiker, Amraoti, and Wun districts, but in that last mentioned are a wild and uncivilised race. *Andh* are also called *Pardhan*, and are said to be belot *Gond*, but they are cultivators. They eat meat, but not the flesh of animals which have died of disease.

Banjara have the three sections, Charan, Labhana, and Matturiah. They eat together, but do not intermarry. Their war and love songs and their language are in a form of Hindi. They are illiterate.

Kaikari of the Mahratta country and Berar and Central Provinces are supposed to be the same as the *Koreha* of Bellary, the *Korawa* of N. Arcot, the *Koragar* of the Canara jungles, and the *Yerkuala* of Madras, all skilful thieves. They have 1272 divisions.

Kaikari, in Berar, are a migratory and predatory race, ostensibly basket-makers, using the midrib of the fronds of palma, also cotton stalks. In 1867 an effort in Berar was made to compel them to settle, but they preferred expatriation.

The *Kolam* extend along the Kandi Konda or Pindi Hills, on the south of the Wardha river, and along the table-land stretching east and north of Manikghar, and thence south to Dantaupalli, running parallel to the right bank of the Prauhita. They eat with the other *Gond*, but do not intermarry.

The twelve *Gond* clans are—*Padal*, also called *Pathudi*; *Pardhan*, *Raj Pardhan* or *Desa*; *Dholi*; *Ojhyal*; *Thotyai*; *Koilabhutal*; *Madya*, called *Jhodia* in Bastar; *Kolam*; *Badiya Hullwa*; *Gaiti Gond*; *Moria Gond*; *Kur* or *Munsi*.

They are also said to arrange themselves into 13 sections, viz.—

<i>Manes.</i>	<i>Kahilwar.</i>	<i>Jaduwan.</i>	<i>Khatulia.</i>
<i>Gowari.</i>	<i>Thotli.</i>	<i>Kohalin.</i>	<i>Thakur.</i>
<i>Raj Gond.</i>	<i>Pardhan.</i>	<i>Andh.</i>	<i>Buchadi.</i>
<i>Dalwe.</i>			

The *Madya* are savages on the Beila Dila Hills and in the remoter parts of Chanda; the sole covering of the women is a bunch of leaf twigs in front and behind, kept in position by a string round the waist.

The men and women of the *Gond* never associate at work, but labour apart. A *Gond* desirous of having a wife, and having resolved on a particular girl, takes with him a band of his comrades to the field where the women are at work, and he suddenly, alone, runs towards and attempts to capture her. His comrades will not, however, aid him to carry off the girl unless he succeed in touching her hand before she reach the village shelter. By touching the girl's hand, the marriage contract is sealed and cannot be broken; nevertheless the women often fight every inch of the ground, inflict the most serious hurt and some-

times shameful defeats, continuing the contest even after the bridegroom has touched the bride's hand, and if the village skirts be reached, the men turn out to aid the women, and pursue the attacking party back to their own village.

Koli, of Berar, are the Mahadeo *Koli*, Bunkar *Koli*.

Kunbi constitute a large part of the cultivators in all Maharashtra, in the north-western parts of Hyderabad, in Berar (681,368 souls), in the Central Provinces.

The *Kunbi*, in Berar, allot themselves into 11 classes—

<i>Mali.</i>	<i>Haldi Mali.</i>	<i>Sagar.</i>	<i>Vindesa.</i>
<i>Ful Mali.</i>	<i>Wanjari.</i>	<i>Atole.</i>	<i>Pazni.</i>
<i>Jerat Mali.</i>	<i>Gantadi.</i>	<i>Telale.</i>	

With the exception of the *Haldi Mali* and *Pazni*, they have *Roti vya whar* amongst each other but not *Beti vya whar*, i.e. they eat with each other but do not intermarry. The *Kunbi* and *Mali* alone, of the *Sudra* people, are 834,588 souls. The *Kunbi* and *Mali* eat flesh, drink liquor in moderation, and their widows may all re-marry if they choose, except those of the *desh-mukh*, who follow the high caste custom.

Since Berar came under British rule, many immigrants have added to its people, and the revenue has greatly improved. Receipts, Rs. 1,01,73,849; expenditure, Rs. 87,83,350; and there are now 896 schools, with 35,891 scholars.

The prominent religious sects are the—

<i>Lingait.</i>	<i>Muhammadar.</i>	<i>Sanyasi.</i>
<i>Jain.</i>	<i>Sikh.</i>	<i>Byragi.</i>
<i>Varshnava.</i>	<i>Manbhao.</i>	<i>Jogi.</i>
<i>Rai Dasi.</i>	<i>Nanik Shahi.</i>	<i>Gosain.</i>

Religious mendicants—

<i>Bhat.</i>	<i>Gosawi.</i>	<i>Waghe.</i>
<i>Thakur.</i>	<i>Byragi.</i>	<i>Dangat.</i>
<i>Gurao.</i>	<i>Nath.</i>	<i>Dandigan.</i>
<i>Manbhao.</i>	<i>Gondhali.</i>	

Many deified persons—

<i>Krishna.</i>	<i>Hanuman.</i>	<i>Panchwai.</i>
<i>Siva.</i>	<i>Rukmini.</i>	<i>Satwai.</i>
<i>Ganpati, Ganesh.</i>	<i>Kandoba.</i>	<i>Asra.</i>
<i>Bhawani.</i>	<i>Bhairava.</i>	<i>Trees and plants.</i>
<i>Surya.</i>	<i>Ram-das.</i>	<i>Mari Mai.</i>
<i>Rama.</i>	<i>Tukaram.</i>	<i>Spirits, demons.</i>
<i>Parasurama.</i>	<i>Maneshwar.</i>	<i>Cobra.</i>
<i>Vithoba.</i>		

Kandoba is largely worshipped in the Mahratta country, and is assumed to be an incarnation of *Siva*. In Berar, until lately, women used to swing themselves by iron hooks fastened into their flesh, after first naming their petition to the priest; in his honour, also, men drew strings of heavy carts by means of iron hooks fastened into their bodies. The *Wagher* beg in his name, and the *Murali* are devoted to him. Many houses have a silver image of him, sword in hand, on horseback, before which, on the *Champa Shasti*, they wave a copper platter, bearing cocoanut, jagari, turmeric, and sixteen small lamps made of dough. His votaries offer him brinjals and onions, which they may not use themselves before this day. He rides on a black dog, which is worshipped. He is worshipped on Sunday, and is also called *Martand* (the sun).

The *Kunbi* and *Mali* worship at Muhammadan shrines. No non-Hindu is allowed to approach a temple; his touching it is pollution. They have as deities, stones daubed. Sikhs are few in

Hyderabad or Berar, and are mostly of mixed descent. The sect have a college at Nandeir, on the left bank of the Godavery. On the 10th day of the Dasara, in Berar, a married girl is worshipped.

Some Mhar worship Vithoba, the god of the Pandarpur temple. Others worship Varuna's twin sons, Meghoni and Deghoni, and his four messengers, Gabriel, Azrail, Michael, and Anadin. They worship also Kali Nik, Wackach, Sari, Gari, Mai Kans, Dhondiba; likewise the four Bhairava, Kal, Bhujang (snake), Samant, Andhut; the heroes Bhima, Arjuna, Lachman, Ch'hatrapati (Sivaji), and others; and the demons Aghya and Jaltia Vital. In their worship, some are said to officiate naked; others with their clothes wet and clinging. The statues of Vithoba and Rukmini are nude. The Mang worship Mahadco; he swears by the dog. The Dukar Kolhati hunt the wild boar, and kill a boar when they worship Bhagwan every year or so.

The *Manbhao* are a small order of Cœnobites. They admit both sexes, who are celibates, though they form one community. They wear black clothes, and shave their heads. One of their principal math or monasteries is at Rithpur, near Ellichpur. They are all over Maharashtra; some have married and settled down in villages. They worship Krishna and Datatri; they are of quiet, inoffensive manners, and their nuns and monks wear black clothes. Their number in Berar is only 3519. The sect was founded about the 17th century by Kishn Bhut, a Brahman, who is said to have had four sons by a woman of the Mhang or leather-worker race. At the present day celibacy is professed by the men and women, and both wear a black cloth tied round their waist, forming a skirt, to indicate that they do not recognise any distinction as to sex. Their name is said to be Maha Anubhao, great understanding, abbreviated into Manbhao. The Gharbari are laymen, and the Byragi, who wear black clothes, are both monks and nuns. They are hated by the Brahmans. They do not admit the low-caste Mhar.

Datatri is a son of the rishi Atri (supposed to have been a triune incarnation of Brahma, Vishnu, and Siva). The Gharbari are lay members; the monks and nuns wear clothes stained with lamp-black (*kajal*). They are admitted into the order by the chief monk cutting off a portion of the hair; the monks and nuns are clean shaven. They are prohibited drinking the water of any village in which there is a temple to any goddess; they are not to drink the water of a village in which a man has been murdered or poisoned, or been killed by falling into a well. If a man die a natural death, they must visit a graveyard before they eat or drink. They will not cut or break down a tree, large or small. Tulsi Bai, the mistress of Jeawunt Rao Holkar, was a Manbhao woman. The Gosawi, Manbhao, and Gondhali recruit their ranks from Sudras of any caste.

Trees.—In Berar, certain families hold in honour certain trees and plants; and at marriage times branches of those trees are set up in the house.

Maroti is a deity of the people of Berar, to whose guardianship they confine their boundaries. Numberless temples, shrines, and images are erected to him, but no specific rites are celebrated to his honour. He is nowhere styled Hanuman,

and only the educated are acquainted with the legends which suppose him to have been chief of the Langur monkey tribe.

Marriage.—In Berar, a widow is married by the 'pat' form, an inferior ceremony. The groom is not married to the woman, but to the swallow-wort plant, or to a ring or a pitcher. The twigs of five plants are used,—the mango, the shami, jambul, apata, and swallow-wort. The trees are worshipped, a twig is cut from each; in the bride's house they are placed in an earthen pot, around the mouth of which is bound a strip of yellow cloth, torn from a woman's bodice. They are subsequently worshipped at the Deokundi ceremony. After death, when the corpse has been washed, dressed, and anointed, a sprig of holy basil is placed on the dead man's mouth or ear.

In Berar, most Hindu women are allowed to make a second marriage. Ahir, Gujar, Jat, the younger brother marries the widow of the elder brother.

Vidur and Krishnapakshi are the same. They are the offspring of Brahmans with women of inferior caste.

MYSORE.—The great central plateau of the Peninsula of India includes the Mysore territory, the British districts of Salem, Bellary, Cuddapah, Kurnool, the Hyderabad dominions of the Nizam, the British districts of Belgaum, Dharwar, Sholapur, Poona, Aurangabad, and the assigned province of Berar. They present vast undulating plains, of various elevations from 1400 to 3000 feet above the sea, almost entirely devoid of trees, and with but little low jungle. Here and there low ranges of hills appear, and isolated rocks, hills or drags, mostly bare or springled with a low brushwood. Towards the north and west of this plateau region large steppes occur. The surface is more broken by hills and ravines than in the south, with a greater abundance of low jungle and stunted trees. In many of the ravines are timber trees, and towards the more northern portions there are considerable tracts of long grass lands or 'rumnabs.' The whole of this tract was formerly named the Dekhan, from the Sanskrit Dakshina, meaning the south. The prevailing character of the soil in the Salem and Mysore portion of this region is a reddish loam overlying gneiss and granite rocks; in the Ceded Districts, in the eastern part of Hyderabad, and in the Southern Mahratta country, it is mostly regur or black cotton soil, overlying sandstone, limestone, and claystone strata, with patches of red soil, but regur is the only soil visible over all the great volcanic outburst of greenstone that covers Berar, Poona, and the west of Hyderabad, and north to the Nerbadda.

When Tipu Sultan fell at the storm of Seringapatam, the British placed on the throne a descendant of a former Hindu ruler, but his administration was not successful, and in 1832 Mysore was placed under a British officer as commissioner. On the 25th March 1881, on the present ruler coming of age, the country was restored; but, by treaty, Bangalore and its outskirts, 12 miles square, was assigned to the British. It is the British cantonment in Mysore.

Mysore, Maisur, or Maheshwar, as a State is in alliance with the British. Its ruler, H.H. the Maharaja Chamarajendra Wodeyar Bahadur, is a Hindu prince, and was adopted by his childless pre-

decessor. The territory has an area of 24,728 square miles, and in 1881 there was a male population of 2,085,842, and females 2,100,346—total, 4,186,188, being 169 to the square mile. Ten years before, in 1871, a census was taken, which showed males 2,535,924, females 2,519,488—total, 5,055,412, or 204 per square mile. Loss of males, 450,082; loss of females, 419,142; total loss, 869,224. The loss of the male population was 18 per cent., and that of the female 16 per cent.

The loss in the Hindu and Buddhist population was 864,343 souls in 4,820,688, or at the rate of 18 per cent. on the population of 1871.

The Muhammadan loss was 8517 in 208,991, being at the rate of 4 per cent.; but Christians increased 3573 upon 2566.

The Mysore people recognise 101 castes in their country, but in the census of 1871 the enumerators returned 413. The more important are as under:—

Beder,	171,269	Lingact,	80,821
Brahmans,	162,652	Madigaru,	174,824
Buddhists,	9	Muhammadians,	200,484
Christians,	29,249	Rajputs,	13,251
Halu Kurubaru,	225,282	Reddi,	54,593
Hindus, others,	3,780,433	Paraces,	47
Holar,	447,421	Sikhs,	41
Jain,	10,760	Sivachar, Gan-	
Jew,	1	daru,	259,110
Komati,	25,985	Wakkali,	695,215

The Banajiga (29,866), Idiga Nagarta (4888), and Tiglar, market gardeners (28,780), are also named. The Idiga in Coorg collect the palm wine.

In 1871 the principal tribes were named as under:—

Brahman,	169,637	Lumbana,	33,000
Kahatriya, Rajputs,	67,358	Parsee,	43
Wakkaliga,	1,191,000	Muhammadians,	208,991
Kuruba,	371,000	Buddhists, Jains,	13,263
Baidara,	262,000	Christians,	25,676
Korawa,	36,600		

There have been many immigrants from surrounding nations, as the languages current in 1881 will show, but the country is essentially Canarese:—

Hindustani,	231,450	Konkani,	4,370
Telugu,	637,230	Coorgi,	21
Mahrati,	67,871	Persian,	118
Tamil,	130,569	Arabic,	40
Gujerati,	1,181	Pushtu,	87
Canarese,	3,095,617	English,	8,148
Malcalam,	332	Sindi,	17
Tulu,	8,941	Other ten tongues,	30

Many of the Muhammadians are descendants of immigrants, and others are of Hindu origin. During the reigns of Hyder Ali and of his son Tipu Sultan, numbers of Hindus were forcibly converted to Muhammadanism.

The *Labbai* are commercial. Colonel Wilks says that in the 8th century, during the administration of a cruel governor of Irak, Hajaj Bin Yusuf, members of the house of Husain abandoned their native country, and settled in the Konkan and to the east of Cape Comorin, and were the ancestors of the *Labbai*. See Labek.

The social customs of many of the Hinduized and aboriginal tribes differ from those of other parts of India.

Brahmans.—Among the Smartta and Madhava the mother will not eat anything cooked by her daughter until the birth of her daughter's first child, as she only then becomes ceremonially pure. The Sanketa or Sanketi Brahmans of Mysore are

an offshoot from a Smartta colony in the Madura district, and speak a corrupt Tamil. Their women tie their saree cloth tight round the body.

The *Wakkali* or *Wakkaliga* is the great agricultural body throughout the Canarese-speaking districts. Their number in Mysore is 695,215. There are eight sections,—Nonaba, Gangadikara, Maliya, Mornsa, Lalgunda, Reddi, Kamme, Kunchatiga, and Nadavar. They eat together, but only marry in their own respective clans. Some of the women of the Morasa section of the Akaliya had to sacrifice a finger of their right hand previously to piercing the ears of the eldest daughter, preparatory to her betrothal. Placing the finger on a block, the blacksmith with a chisel and hammer strikes it off at a single blow. If the girl to be betrothed be motherless, and the mother of the boy to whom she is to be betrothed have not before undergone the amputation, she has now to permit the sacrifice. See *Wakalu*.

The *Holar* or *Holiyar* is the great servile race of all the Canarese-speaking countries, taking the place of the Mahratta Mhar, the Hyderabad Dher, the Teling Mala, and Tamil Parayan.

The *Kulawadi*, village policeman, headle, henchman of the headman of the village, boundary commissioner, is invariably a *Holiyar*. The *Holiyar* are farm labourers, watch the herds, and one of their number is generally priest of the village goddess. Every village has its *Holigeri* or *Holiyar's* quarter outside the village boundary hedge, and they object to and prevent Brahmans passing through their hamlet. If attempted, they turn out in a body, slipper him, in former times even to death. Other castes may approach to the door, but must not enter. If by chance a person do get in, the owner tears the unwelcome intruder's cloth, ties up some salt in a corner of it, and then turns him out. This is supposed to avert any evil which his presence might have brought on the owner of the house. At Melkot, the chief locality of the followers of Ramanuja, and at Beleru, where there is also a deity worshipped by Brahmans, the *Holiyar* have the right of entering the temples on three appointed days of the year. At Melkot they have the privilege of dragging the car. Captain Mackenzie mentions that all castes in the village recognise the *Kulawadi* as the rightful owner of the village. If a question be raised as to the village boundary, the *Kulawadi* is the only one competent to take oath as to how the boundary ought to run. The old custom was for the *Kulawadi* to place on his head a ball of earth, with some water in the centre, and to march the boundary. If he march wrongly, the ball falls to pieces, the *Kulawadi* dies in fifteen days, and his house becomes a ruin. On a death occurring, the *Kulawadi* receives a fee from the family, who thus 'buy from him the ground for the dead.' The fee is called *Nela-Haga* (in Carnatica, *Nela*, earth, and *Haga*, a coin worth one anna two pie). The *Kulawadi*, however, is not supreme; he again pays annually one fowl, one hana (4 annas 8 pie), and a handful of rice to the agent of the Sudagadu Sidda (or lord of the burning grounds), who resides in the Baba Booden Hills, and appoints agents for the tracts of country to collect his dues.

The skins of all animals dying within the village boundary are the property of the *Kulawadi*, and

this one fact often settles a village boundary dispute. The Karu Kallu is the village boundary stone; it is a plain menhir, and the village Patel once a year makes an offering to it, which the Kulawadi at the conclusion of the ceremony carries off. Where there is no Patel, the Kulawadi performs the annual ceremony. The ordinary attire of all the Holiyar, and of the Mhar, is the narrow lungoti strip of cloth passing between the thighs, with a coarse hair blanket or cumbli for covering. The ancient Mysore Holiyar, Virabaraka, is said to have been cursed by the gods thus:—

'An old cumbli for clothing, a stick in your hand,
The leavings of betters you'll eat in this land.'

And these words paint the present condition of the Kulawadi.

Washermen of Mysore worship Basava-devaru or Ubbe in a temple with a shapeless stone, and to this they sacrifice animals, to prevent the clothes being burned in the Ubbe or steaming-pot. They also worship Vishnu. Basava lived in the 12th century, at Kallian, where he was minister to Bajal, the king, and he introduced there the worship of the lingam. But the Mysore washermen, though worshipping Basava as a deity (devaru), nevertheless are Vaishnava.

Beder or *Nayik*.—Their clans are called Kiratika, Barika, and Kannaiya in different parts of Mysore. They have two other divisions, Karnata in the south, and Telinga in the north, who neither eat together nor intermarry. The former wear the lingam. Most of the Pallegar of Mysore are of this race. They are a brave, martial, but predatory race, and have two small principalities at Beder Zorapur and Gurgunta, between the Kistna and the Bhima rivers. The Beder are said to have formed part of the armies of Tipu.

Pindari (Beder) tribe of Muhammadans, converts from the Beder race, and were formerly predatory, have now settled to agriculture, and take employ in the Mysore horse.

Idiga, or toddy-drawers of Mysore (80,715), worship all the Hindu deities, but especially evil spirits, and they adore pots full of toddy. In the Nagar division they are called Hale Paika, and were soldiers under the Pallegars. They eat animal food, and drink largely. Their widows do not re-marry, but are concubines, and their children become an inferior division of the caste.

Kuruba of Mysore have two sections,—Betta Kuruba and Hande Kuruba. The Kuruba worship Bire-devaru, also a box containing the wearing apparel of Krishna under the name of Junjappa. They are agricultural, herdsmen, labourers, and blanket weavers.

Betta Kuruba or Hill Kuruba are met with in the forests along the S.W. boundary of Mysore, and amongst the hills at the foot of the Neilgherry range, living in small, rudely-built villages called Hadi. They earn a livelihood by felling timber, at which they are very expert. They are a diminutive race, the men averaging about 5 feet 2 inches in height; but they are very active, and capable of much endurance. Of late years they have been seeking employment in the neighbouring coffee estates. The *Jenu* or Honey Kuruba (1094) gather honey and other forest products. They are shorter and darker than the Betta Kuruba, and in Coorg are migrants. *Iraliga* collect forest

produce, and differ from the Jenu Kuruba only in name. See Kuruba.

Badaga, of the Neilgherry Hills, regard the Kuruba as sorcerers, and at the beginning of the ploughing season they get a Kuruba to turn the first furrow, and to bless the first handful of the seed corn, otherwise they imagine the harvest would be a failure, and they give the Kuruba a small portion of the crop.

Soligu (1069) dwell in the Beligiri-rangam Hills on the S.E. frontier of Mysore. They live in small communities of five or six huts in the midst of the forests. They speak old Canarese. They cultivate with the hoe small patches of ground to grow a coarse plantain, vegetables, and a little ragi, which they eat with edible roots and the flesh of animals they catch. They avoid strangers as much as possible, and visit the plains only to purchase necessities.

Natya (Natya, SANSK., dancing), or dancing women attached to temples, are also called Kunda Golaka. They are drawn chiefly from the Sudra classes, Banajiga, Beder, and Besta; are born in the caste, or adopted or devoted by their parents even before birth.

Waddara are earth and stone masons, but give information largely to robbers. They are polygamists on a large scale, and widows and divorced women are re-married.

Hasular occupy the ghats in the N.W. part of Mysore. They are a short, thick-set race, very dark skinned, and with curled hair. They fell timber, work in betel-nut gardens, and gather wild cardamoms, pepper, etc. They speak a dialect of Canarese.

Yerava, in the southern taluks of the Mysore district, are said to have been slaves to the Nairs in the Wynad district. They resemble the African in features, having thick lips and a compressed nose. They speak a language of their own.

Nagarta call themselves Vaisya Hindus, but this claim is not admitted by the Brahmans or by the Komati. They engage in agriculture, but never till the ground with their own hands, nor even follow any mechanical profession.

Of mendicant sects in Mysore, the more important are the Dasa, Jangama, Satani, Domba, Jangalaga, Budabudiki, Pichakunte, Hale or Pansu, Makkalu, and Helva or Paknati Jogi.

In 1871 there were 12 wild tribes, 44 servile tribes, and 16 of homeless migrants. Omitting mere trade and country designations, the remaining castes and tribes are the Agamudi, Agasa, Besta or Bhoi, Bilwa, Golla, Koracha, Lumbana, Murka or Hale Kanadiga, Namadhari, Palli, Rachwar, Rajpindi, and Uppara.

Many of the Christian sects of Europe have missionary bodies in Mysore,—English, French, German, Scotch, Roman Catholics; but the French have been prominent since the days of the Abbé Dubois in the 18th century, and they have now a vicar-apostolic, with 13 European missionaries and native priests.

Mr. (Sir) Walter Elliot mentions in the Journal of the Ethnological Society that the Canarese race of Mysore and the Southern Mahratta country believe that the spirits of unmarried persons, of the unchaste, of those who have died a violent death, etc., become malignant ghosts, called Viraka, who are appeased by offerings.

COORG or Kodaga is a British province to the

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west of Mysore, between lat. 11° 55' and 12° 50' N., and long. 75° 25' and 76° 14' E. It is 60 miles long by 40 broad, and its area is 1583 square miles, with a population of 178,302, of whom 77,863 are females. It is a hilly country, culminating in mountain ranges, the highest being 5375 feet above the sea. Kodaga is said to mean west.

In 1834 it was ruled over by a raja of the Lingaet sect of Hindus; but his cruelties, carried on for a long series of years, brought on a war with the Indian Government, and, after a battle on the 8th April 1834, the country was annexed. Since then, the general population has largely increased by settlers from surrounding districts, but the Coorg are believed to be diminishing.

The numbers speaking the current languages perhaps best show the original nations of the present inhabitants:—

Canarese,	92,079	Konkani,	1,689
Coorgi or Kodaga,	28,535	Wild dialects,	13,853
Malcalam,	10,189	English,	514
Tulu,	9,589	Lambani,	111
Hindustani,	8,513	Gujerati,	58
Tamil,	5,025	Portuguese,	57
Telugu,	5,008	French,	9
Mahrati,	3,055	German,	14

The Coorg race have 13 clans, but they arrange themselves into Coorg and Amma Coorg. They are a tall, muscular, broad-chested, well-favoured race of mountaineers, 5 feet 8 inches to 5 feet 9 inches in height, handsome and well made, far superior in physique to the inhabitants of the plains, whom they greatly despise. They are also far advanced in civilisation, and are very intelligent. They have a Caucasian head, regular features, aquiline nose, with chiselled lips, black eyes, and dark hair. They wear whiskers and moustache, but no beard, have a fair complexion, with intelligent countenances, and general bold, independent deportment. They follow agriculture, and a few seek other employments; but, as a rule, they eschew military employ. They believe themselves to be descendants of the daughters of Chandra Varma, king of Matsa Desha, obtained by the intercession of Parvati. Chandra Varma is said to have come originally to Coorg. The vice of drinking has a deep and widely-spread hold upon them. They marry at a ripe age, but the wives of brothers are in common. They are a compact body of mountaineers, who have been lords of the soil from time immemorial. They live in farm-houses far apart. The Amma Coorg take among the Coorgs a place similar to that of the Brahmans among Hindus.

The Coorg despise manual labour, and cultivation is carried on by the immigrants, the Tamil Vellalar, the Teling Reddi, the Canarese Wakala, and the Malabar Nair, while the Teling Sudra are labourers. The Arambaguru are agriculturists, and the Arambada Kikartiru are dependents on the Arambaguru.

The 1881 census return classifies the people as under:—

Coorg,	26,558	Non-Hindus,	56,030
Amma Coorgs,	475	Muhammadans,	12,541
Brahmanas,	2,445	Native Christians,	2,637
Rajputs,	480	Europeans,	228
Other Hindus,	56,801	Kurashians,	287
Inferior castes and tribes,	21,100	Jains,	99
		Parsees,	21

The following tribes have not accepted Hinduism:—

Balagai Holeya, agriculturists.	Malaya Holeya.
Kembati, natives of Coorg.	Marta do.
Mari Holeya or Moringi, coolies from Malabar.	Parava do.
	Kukka, coolies from Canara.

Other aboriginal and jungle tribes are—

Adigarai, labourers, speak Malealam.
Ajala, " from Canara.
Betta Kurubi, a fowler tribe from Malabar and Canara.
Jenu Kuruba, foresters.
Palay, agricultural labourers, speak Tulu.
Yarava, of 2 sections, Paniyar and Panjira, from Wynad.

Holeya, labourers in Coorg, number 32,450. They are ill-favoured, with coarse, stupid features, short in stature, but strong built, with dark or black skin and black, straight hair. They practise demonology. Some of them, as the Badagu, speak Canarese. Others, as the Kembati, speak the Kodaga tongue. They are of small stature, eat beef and other flesh meats. They worship Kyappa-devuru and Jamauts.

The Yarava of Coorg number 11,894. They came from the Wynad and settled in the Yedeknalknad and Kiggatnad taluks. They have thick lips, woolly hair, and black complexion. They are labourers. Their language is said to resemble Malealam; they worship evil spirits, and have no priests.

The Betta Kuruba are well proportioned, with good features. They are fowlers, mat and basket makers. They have a central hut, around which other huts are erected, like the nave of a wheel. All adult males sleep in the central hut. People approaching the huts have to take off their shoes.

Hegade, a small tribe of cultivators in Coorg, of small stature, who follow Coorg customs, but do not eat or intermarry with them.

In the S.W. part of Coorg are the priests of Amma, the goddess of the river Cauvery. They generally retain the old devil-worship of the Dravidian race, of which they are a branch. They chiefly worship the goddess Cavaro Amma or Parvati; but demon and ancestor worship are common.

The languages prevailing are Coorg, Canarese, Malealam, Tamil, Tuju or Tulu, Urdu, and English. The Coorg or Kodaga language has generally been regarded by some as Canarese, modified by the Tulu. But Mr. Moegling states that it is more nearly allied to the Tamil and Malealam than to the Canarese. It is generally recognised as between Old Canarese and Tulu. It is admirably suited for expressing easy-flowing poetry of a humorous or solemn strain.

TRAVANCORE has an area of 6730 square miles, and a population of 2,401,158, being 357 to the square mile; the males, in 1881, were 1,197,134, and females 1,204,024. The Travancore dominion is also called Kerala, a term which is supposed to be derived from its dense forests of cocoanut palms. It is also called Veynad, also Tirupapur Swarupam, likewise Karma-Bhumi, the eastern coast being Jnana or Punnea-Bhumi. Trividam Code is the original of the Travancore of the English. The people know it as part of the Malealam, which means literally hill and dale. In the native parlance, the term comprises the districts of Malabar, South Canara, and the Native States of Cochin and Travancore. By Europeans, however, Malabar is the name given to the coast region of the extreme S.W. of the Peninsula of

India. Its inhabitants have not been often disturbed by foreign war, but the external influences of foreign races engaged in commerce have been largely felt.

Parasurama, in his invasion from the north, overran the provinces below the ghats, overcame the races which he found there, exterminated the higher classes, and introduced foreigners. His march probably extended to Cape Comorin, whence he drove Ravana, the native ruler, and many of his followers, into Ceylon, from which, at a later period, the ancestors of some of the castes of Tinnevely and of the Tiyars of Malabar returned. He was not a Brahman, but seems to have been an aboriginal chief whom the Brahmans employed in their schism with the Kshatriya; he is represented as exterminating the Kshatriya with his battle-axe (*parasu*), which is the distinguishing weapon of the Kond. He has been deified as one of the incarnations of Vishnu.

Sects.—From Bombay to Cape Comorin are many indications of long-continued intercourse with western nations, and from prehistoric times coins of Augustus, Tiberius, and later emperors have been found in Malabar and Coimbatore. A colony of *Nestorian Christians* from Antioch early settled to the south of Goa. The *Jews* of Cochin possess copper *sasanams* of a king of Kerala, attested by witnesses signing their names in Archaic Hebrew, Cufic, and Pehlavi, about the 6th or 7th century. Many families professing Judaism are scattered through the Southern Konkan, but they are not Jews, more probably Samaritans, who call themselves Ban-i-Israel. In Cochin there are two classes of Jews, one of them very fair, and of pure descent from the parent stock, the other dark, and probably proselytes or slaves.

Rulers.—Since the 14th century, portions of this coast region have been under the control of the dynasty of Bijanagar, of the Adal Shahi of Bijapur, of the Portuguese and Dutch from Europe, of Muhammadan rulers of Seringapatam, and of the British; and in the wars of these races many ancient chiefs have disappeared, and amongst them the Zamorin of history has lost nearly all his ancestors' possessions. These changes and immigrations have introduced many castes and customs peculiar to this region. Amongst the former are Namburi Brahman, Tiruvappaud, Tamban, Koil-Tamburan, Samunthaken, Pundala, Unniathiri, Kurthavu, Nedungadi, Eliathu, Mut'hathu, Adicul, Chakiar, Nambiar, Oonnee, Paharodi, Pushpaken, Varier, Alat'hi, Nambidi, Thyambadi, Plapulli, Nair, and many others.

Inheritance.—Many of these have adopted the custom of the descensus ab utero, the descent by the female line, which they designate Marumakkattayam. The Ponan, a branch of the Tir or Ilivar, have not adopted this. Also amongst the Namburi Brahmans, only the eldest brother marries, the unmarried girls being carefully secluded, and many never marry at all; but even the Moplah Muhammadans follow this law of inheritance. Along with and dependent on it is the existence of polyandry amongst the Nairs of Malabar, which also in a household form prevails amongst the people of Coorg, as also amongst the Toda of the Neilgherries, amongst the Kapilli tribe on the Diudigul valley, amongst the Totti, a Pariah race in Mysore, also amongst the people of the Tibet

Kerala or *Malealam*, also written Malayarma and Malayama, from Mala, a mountain, and Alam, a dale, is a long tract of land extending from Gocurnum near Goa to Cape Comorin, and includes within it the British districts of South Canara and Malabar, and the Feudatory Cochin, Calicut, and Travancore under Hindu rulers, with the Muhammadan Bibi of Cananore. The country is a succession of hills and valleys. Kerala is supposed to be a dialectal change from Malikeran, coconut, dense forests of that palm growing in the country; but it is also said to have been derived from a prince of that name who is famed for wisdom, benevolence, and moderation. The total area of that united Malealam or Kerala tract is 16,634 square miles, with a population of 5,490,991. The most distinctive part of the tract is Travancore, which has an area of 6730 square miles, and in 1881 a population of 2,401,158.

Languages.—From its position in the extreme south, with a seaboard the first to be touched by voyagers from the west, races are there of the most diversified origin, and the languages current are Arabic, Hebrew, English, French, Portuguese, Sanskrit, Urdu, Hindi, Mahrati, Gujerati, Sindi, Konkani, Malealam, Tulu, Tamil, Telugu, and Canarese, though Malealam and 16·8 per cent. of Tamil are the tongues used by 99·2 per cent. of the population, Malealam principally to the north of Trevandrum, and Tamil south of that city. Adjoining the Malealam district on the north is the S. Canara district, in part of which, around Mangalore, the Tulu language is spoken, Canarese being the tongue in general use.

The Malealam language is spoken in the low country and along the Western Ghats, from Cape Comorin to the Chandragiri river, or more strictly, perhaps, to Nileshwar (Nileswara), where a Nair raja, conquered by Hyder Ali, formerly ruled.

The people occupying that tract are mostly settled, but it has had several dynastic races; the Zamorin of Calicut, the Bibi of Cananore, the raja of Cochin, the raja of Travancore, and the Dutch, have all held away there; but the present rulers are the maharajas of Travancore and of Cochin, the Zamorin of Calicut, and the Bibi of Cananore; and the present paramount power is the British.

Tulu, Tuju, or Tulava, a cultivated Dravidian tongue, is an idiom which holds a position midway between the Canarese and the Malealam, but more nearly resembling the Canarese. Though once generally prevalent in the district of Canara, it is now spoken only in a small tract of country in the vicinity of Mangalore, by not more than 100,000 or 150,000 souls. It has been encroached upon by many languages, and is likely soon to disappear. The Tulu has a strong resemblance to Malealam, though the Tuluva-speaking race are unable to understand their Malealam neighbours. The people speaking the Tulu shrink from contact with foreigners, even from people of their own caste, retreating from the great roads, cities, and bazars as eagerly as the Tamil flocks to them; and the Tulu-speaking race are to be found isolated with their families in their high walled parambu, in parts where the lines and centres of communication are entirely occupied by the more enterprising Tamil people. Tulu is the original language of

the Canara collectorate, but has been largely displaced by Canarese, the language of the conquering power about the 15th century. It now prevails (though not exclusively) from the north border of Malabar (Kavai), where it is much mixed with Malealam, to Udapi in the north. Mangalore, Mulki, and Udapi are the chief places where it is spoken. The Tulu people belong to the same race as the TAMIL and Telugu family, now conventionally called the Dravidian race. There is no doubt that Tulu is a dialect of the Canarese, and closely allied to the Toda, Badaga, and Coorg dialects. There do not seem to be any dialects of Telugu. Malealam is a dialect of Tamil. By dialect is meant that these languages were, many centuries ago, the same as the Canarese and (in case of Malealam) as Tamil, but that long separation and different influences have caused the variations we now see. Tulu, Toda, etc., are far more closely allied to Canarese, and Malealam to Tamil, than Canarese, Tamil, and Telugu are to one another. The Tulu people have no literature, except a few translations by German missionaries.

Travancore Castes.

Ambalavasi, . . .	7,078	Malayala	Sudra,
Brahmans, . . .	37,138	Nair,	464,239
Christians, . . .	498,542	Maravan, . . .	5,556
Channan? . . .	128,600?	Mauran, . . .	11,822
Chaliyen, . . .	6,766	Mukkuvon, . . .	29,342
Chaluppen, . . .	779	Muthali, . . .	544
Chetty, . . .	21,852	Muhammadians, . . .	146,909
Chemman, . . .	1,042	Noolayen, . . .	2,185
Kelaven, . . .	387,176	Paraven, . . .	959
Kelayen, . . .	5,823	Panen, . . .	2,020
Klavaniyen, . . .	3,097	Pandi Sudra, . . .	45,563
Klayathu, . . .	2,425	Pattunulicaren, . . .	806
Jews, . . .	97	Piuppally, . . .	69
Kaikalen, . . .	603	Poanden, . . .	666
Kaniyan, . . .	8,330	Rajputa, . . .	2,440
Kohavaraken, . . .	14,578	Shankam Pandaram, . . .	8,826
Kammalen, . . .	92,578	Thundan, . . .	21,814
Kushaven, . . .	6,209	Vadugen, . . .	2,069
Kodipallen, . . .	406	Vaniyen, . . .	22,526
Kriahnevvegah, . . .	6,770	Valuthaden, . . .	11,152
Kshatriya, . . .	2,440	Others, . . .	20,617
Mannan, . . .	6,494		

Non-Hindu Aborigines.

Koraven, . . .	54,828	Parayen, . . .	66,454
Malayayen, . . .	17,627	Poolayen, . . .	196,539
Oollalen, . . .	2,846	Vaden, . . .	6,155
Pallen, . . .	5,438		

The ruling families in Travancore and Cochin claim to be of the Kshatriya race, of whom in Travancore there are fourteen clans all regarding themselves to be of the Lunar line, and of one gotram or stock, descendants from one chief. They do not therefore intermarry. Their daughters, with one exception amongst the clans, are usually married by Brahmans, and the offspring are called Samanthar or Murchavasikthar. The exception to this is the Koil Pandula subdivision, from which consorts are chosen for the Rasis of Travancore.

The Malayala Sudras are the Nairs of Malabar. They are the agriculturists of the country, cultivating as tenants of the Namburi, who are the landlords or Janami of Malealam, and who are looked up to as the 'suzerain master, their household deity, their very god on earth.'

The titular designation given to nearly all the Brahmans of Travancore (except to the Papi caste) is Namburi (from Nam = Veda, and Purepika, to complete), meaning an expounder of the Vedas. Among the varied clans of Brahmans in

India, these Namburi take a very high position for sanctity. With the object of retaining their landed property unbroken, succession is from father to son, but it is strictly entailed on the eldest son. The younger sons are not allowed to marry, but visit the Ambulavasi (temple) and Sudra women, who receive them more for the honour than for any gifts they bring. The Namburi are unboundedly hospitable to Brahman strangers, and are charitable. They are of a fair colour, their women are considered beautiful, and the race are remarkable for cleanliness of person and neatness in dress.

Their women often remain unmarried after they have grown up, and even to an advanced age. Numerous daughters are considered a misfortune, the dowry and marriage expenses bearing heavily even on the wealthiest Namburi. Infanticide, however, is unknown. But a Namburi, anxious to see his sisters married, will give them to a family from which he takes one or more wives. The Namburi women are guarded with a more than Muhammadan seclusion. At home they dress like the Nair women, with a cloth from the waist downward. When they move abroad they are covered over with cloths, and attended by a Nair servant woman, who commands all men on the road to stand aloof.

There are 27,138 Brahmans, mostly immigrants from the districts of the Madras and Bombay Presidencies. The Travancore people style these foreign Brahmans 'Putter,' a corruption of Bhatta, devout; but they are also distinguished by affixing the localities whence they came, as Mahratta, Telugu, Tamil, Gujerati, Pandya, Karnatica, Choliar, Gowda, Mukkani, Pataya, Vanchi, Iyengar, and Sanati Brahman.

Inheritance Laws.—The peculiar marriage customs of the bulk of the races in Travancore originated the existing law of inheritance. That law is called Marumakkatayam; it is the descensus ab utero of the Locrians, under which a sister's children inherit. Parasu Rama urged all his Brahman colonists to adopt it, but those of Panniar alone complied. All the Kshatriya families, however, follow this law of inheritance.

The Marumakkatayam law of inheritance is, however, followed by all the Brahmans who serve in temples, by all the Malealam Sudras, most of whom have the titular designation of Nair; by the five artisan castes, the goldsmith, brazier, stonemason, blacksmith, and carpenter; also by the Maran Sudra, who eat rice prepared by a Varier, and whose women receive Variers' visits; by the old Kshatriya race, amongst whom are the sovereigns of the country; and by the Nanjanad sections of the Vellalar race.

Nair girls are all married at an early age, before they grow up, and the ceremony is attended with much display of wealth, but the husband or person who ties on the marriage string (the tali) has no claim to possess her then or in after life. But when she attains maturity she chooses the person with whom she is to associate, who presents her with a cloth. The union agreement, however, on either side is dissolvable at pleasure, the sole restriction on the Nair woman being that she must not admit any man of a class below her own. Accordingly a Nair household has no husband, but consists of its owner, and the maternal uncle, the uterine brothers and sisters,

and the sisters' children. Women may rule the state, and, under the Marumakkatayam law, in nearly half the houses in the country, women are the sole proprietors of their households.

Among those who follow the Marumakkatayam law, a female child is more highly prized than a boy, and the ratio of adult women to 100 men in Travancore is higher than in neighbouring districts, as under:—

Malabar,	110·4	Kistna,	103·2
Travancore,	110·5	North Arcot,	102·2
Ganjam,	110·2	Kurnool,	101·5
Salem,	109·2	Chingleput,	101·4
Coimbatore,	109·1	Nellore,	99·3
South Canara,	109·1	Cuddapah,	99·2
Godavery,	108·2	Bellary,	98·6
Vizagapatam,	104·6	Neilgherries,	80·1
South Arcot,	103·3		

Northwards from Travancore the marriage and inheritance laws vary. The Tuluva people are remarkable for the law of succession called Aliya Santana. This is the law of the so-called Sudra tribes, and a tribe that practises it is probably Tulu. But the race does not include Brahmans or low castes, who are mostly settlers from other parts of S. India, though in some cases they have adopted the custom. In South Malabar, descent is to sons-in-law; but in N. Malabar, the Nair, the artisans, carpenter, brass-smith, blacksmith, and goldsmith, also the Tiar, who are toddy-drawers, and the Mookwa fishermen, are all polyandrist, and the descent of property goes in the female line. In North Malabar, this law of descent is called Marumakkatayam, and the Muhammadan Moplah has conformed to this usage. In Canara, a similar law, called Aliya Santana, or nephew inheritance, prevails, and is in practice more strictly carried out than in N. Malabar. In N. Malabar, the adherents to Marumakkatayam form united family communities, termed Tarwaad. The senior member of whatsoever branch is the head of the family, is termed Karnaven; the other members are styled Anandrar; the remotest member is acknowledged as one of the family, and entitled to maintenance if living under subordination to the head of the family and taking part in their religious observances. For the women there is nothing analogous to the state of widowhood as existing elsewhere. Whether in alliance with men or not, they reside in their own families. The Nair marries before he is ten years of age; but though he supports, he never associates with his wife, who receives, at her pleasure, any men, provided they be not of lower birth. Consequent on this form of descent, a Nair does not know who his father is. In law, property is held to vest in the females only; practically the males are co-sharers with the females. In default of males, females succeed to the management of the family property. In some families the management devolves on them preferably to the males, and the senior female takes it. There is, however, a growing tendency to convey property from father to son, arising from the gradual abandonment of polyandry. The connubial connection in question is called in Malabar Goona-dosham, Goona, good, Dosham, evil (for better or worse). In Travancore it is styled Mundu-vanga, viz. Mundu, cloth, Vanga, receiving, and the girl taken is of ripe age, and her consent must be obtained. Personal acquaintance thus precedes the union. The hour selected

for the ceremony is 8 p.m. There is an assemblage of friends; the man presents the woman with a mundu or white muslin cloth, in a corner of which, in North Malabar, a small sum of money is tied. The girl either goes to the man's house, or remains in her own, and is visited by him there. Each party is unrestricted as to the number of such connections that may be formed, but these ordinarily do not exceed two or three. The descent being in the female line, the parentage of the father is immaterial. The Marumakkatayam law is not followed in North Malabar by the Aka Podwal, a class of pagoda servants, nor by the Brahmans of North Malabar or of Canara. But in Travancore law, as only the eldest brother of a Brahman family is allowed to marry with his equal, the other brothers form other connections, and their children, therefore, do not inherit. In the Tuluva country, the Brahman widow can devote herself to the temple, and reside outside or inside its walls. If within the walls, she is a servant of the idol, and receives the visits of men of her own caste only; the offspring of such, if boys, are called Moylar, and the girls are married to them. But if she elect to reside outside the walls, she must pay a monthly sum to the pagoda, and may cohabit with any man of pure descent.

The Nair women do not cover their bosoms when at home, and, in North Travancore, not even when abroad. With the well-to-do Nairs, reading and writing are essential in the education of the women, and singing and instrumental music are accomplishments. Eighty per cent. of the educated native women are of the Malealam Sudra (Nair) and native Christian classes.

Religion.—In Travancore, the superior divinities are Vishnu, Siva, Bhagavati, and their incarnations. The inferior objects of worship are in the Paikoil or devil-temples and other places. But all the latter, and many of their female gods, owe their origin to Tamil immigrants, the true Malealam population invariably resorting to the higher idols. There have been white and black Jews in Travancore from very ancient times, and Christians from the earliest days of Christianity. At present there are—of the church of Rome, 153,815; Protestants, 57,318; Syrians, 287,409. Muhammadans are 146,909 in number.

The Ambalavasi (Ambalam, pagoda or temple, and Vasi, he who lives), 7078 in number, are peculiar to Malabar. They have fourteen large and numerous small subdivisions, but all are employed in the Hindu temples, of which there is one to every 248 of the population. They abstain from animal food of every kind.

Amongst the Sudra castes in Travancore are the Vellalar, the Mudali, and the Pundi Sudra.

The Vellalar in 1872 were 24,125 in number, and in every district in the kingdom. In the adjoining provinces of British territory, where Tamil is spoken, the great body of the cultivators claim to be Sudras of the Vellala stock, and when well to do they receive the honorific suffix of Mudali.

The Idayan, Edaga, or Yadava is the shepherd race scattered over Southern India. In Travancore they are known as the Konan, Kangayen, Valayadaiyen, and Vaduk-idayen, and are 6319 in number. The Gopa, Gaola, Gorakh, and Satgop of Northern India, Bengal, and Orissa, and

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the Gaoliga of Mysore, and some of the Dhangar, are cowherds, but are not identical with the Kurubar, and some of the Dhangar of the Dekkan, and some of the Abir of Northern India. The shepherd race of Southern India are spreading out into all available employments. They are classed as Sudra Hindus, and usually styled Pillai, in distinction to the Vellalar cultivators, who add Mudali, or first man, to their names; and the shepherds, Idayan, take a lower social position.

The races in Travancore who were held in servile positions are upwards of 30 per cent. of the population, and may be shown as under:—

Chemman or	Shannan,	128,600
Ohakler,	Mookoooven or fisher-	
Kahowraken or	men,	29,342
barber,	Malayaraan,	17,627
14,578	Vaden and Oolladen,	
Kanian or sooth-	hunters,	6,155
sayers,	Puller,	5,438
8,330	Koravar,	54,828
Paraven,	Pariah,	66,454
959	Pullayar,	196,539
Thundan,		
21,814		
Noolian,		
2,185		
Elaven,		
387,176		

The *Pullayar* or *Pulian* are a hard-working and extremely useful race, noted for their truthfulness and integrity. Until recently they were bought and sold like other property, but they all have been freed by the present maharaja. They have remained on the lands they were cultivating. In social life they are lower than the *Pariah*. They speak *Malealam*. They are unknown in the British provinces.

The *Elavar* or *Elaven* are numerous. They aggregate 387,176, and are engaged in cultivation and in manufacturing the produce of the cocoanut tree, which forms a staple of the country.

The *Shanar* or *Channan* race, in number 128,600, are also found in the neighbouring British districts. They are chiefly engaged in the manufacture of the produce of the palmyra palm, *Borassus flabelliformis*, which is only inferior in value to the cocoanut tree.

Some of the *Elavar* and *Paravar* are amongst the most respectable cultivators in the Travancore kingdom. The *Shanar* of S. Travancore are even a more enterprising class; and the *Pariah*, throughout Southern India, is the chief labourer in the fields, and in other out-door work.

The *Kummalar*, or artisans of Travancore,—the goldsmith, the coppersmith or brazier, the stonemason, the blacksmith, and the carpenter. In Travancore, however, the *Chembu-thatti* or coppersmiths claim to be a distinct caste, but this is not conceded to them.

The *Chetty* of Travancore, of whom there are fifteen subdivisions, most of which seem mere nationalities.

Tiyar, from the Singhalese *Twar*, an islander; the *Ponan* race in Malabar. They are a branch of the *Iliar* or *Tir* from Ceylon. They inherit from the father.

Parayer, also *Pula Parayar*, also *Todinvar*, a low-caste predial slave race of Malabar, who are stone-cutters, who are supposed and believe themselves to be wizards and witches. Vengeance and fear have occasionally led to their being cruelly treated.

Paniker, a race dwelling amid the forests and jungles of Malabar, who roughly clear the ground, and raise crops of coarse rice and other grains

during the monsoon, and move to another place. They also collect forest products,—cardamoms, beeswax, gums. Their sole implement is a kind of adze. They are of diminutive stature. There is a small race called *Kanjar Panikar*, who practise astrology and necromancy. They calculate eclipses, cast horoscopes, and foretell the times and seasons, sell charms for all purposes, love philters, discover treasure, cure disease.

Cheramar, one of the predial slave races of Malabar. They are supposed to be descendants of the race conquered by the Chola kings. They are of very diminutive stature, very black skin, and not unfrequently woolly hair. Wilson derives the name from *Chera*, the soil. They follow the rule of *Marumakkatayam*.

Nagadi, an abject race in Malabar, beggars and thieves. They are of diminutive form, of the deepest black in colour, features brutish, hair thick and curly.

Bakadara and *Betadara*, two rude slave races in *Tulava*, who worship a benevolent deity named *Buta*, represented by a stone, kept in every house. They, too, believe that the spirits of the dead become *Paisachi*, and they offer sacrifices to *Buta* to restrain the *Paisachi* from troubling them.

Holier women, until towards the middle of the 19th century, used to visit *Mangalore* with no other covering than thick bushy branches before and behind, hung from their waists.

Baut, a tribe in *Canara* who worship the *Paisachi* or demons, and believe that persons who die a violent death become *Paisachi*.

Bunter, a race in *Canara*, the original land-owners, who follow the rule of female descent. They marry, and the wives reside with their husbands, but do not interfere in the house management.

The *Kurumbalen* are a slave race who worship the hill god *Malai-deva*, and the spirits of deceased ancestors. They burn their dead if good men, and bury them if bad; and they believe the latter to become demons, requiring to be conciliated by sacrifice.

Languages spoken in Travancore:—

Hindustani,	3,037	Konkani,	10,703
Telugu,	3,352	Cutchi,	353
Mahrati,	1,383	Nagaram,	809
Tamil,	439,565	English,	1,060
Gujerati,	571	Arabic,	606
Canarese,	774	Portuguese,	707
Malcali,	1,937,454	Hebrew,	97
Tulu,	664	Others,	22

• *Maleali* is spoken by about 4,847,681 people along the Malabar coast, on the western side of the ghats or Malaya range of mountains, from the vicinity of *Chandragiri* near *Mangalore*, where it supersedes *Canarese* and *Tulu*, to *Trevandrum*, where *Tamil* begins to be spoken; but all along that coast *Tamil* intertwines with *Malcali*, which is a very ancient form of *Tamil*. The *Rama Charita* is the oldest existing *Maleali* poem.

Tulu or *Tuluva* is destitute of a literature in the proper sense of the term, and never had any character of its own. The only books printed in *Tulu* have been by the Basle missionaries. It is one of the most highly developed languages of the Dravidian family. It is spoken by about 300,000 people between the *Chandragiri* and *Kalyanapuri* rivers. It is written with the *Malealam* characters; it differs widely from *Tamil*,

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less so from Canarese, and less again from Coorg. Tulu is said to mean meek, humble.

COCHIN, a small territory on the seaboard of the western side of the Indian Peninsula, in treaty with the British. Its area is 1361 square miles, population 600,278; 301,815 are males. The Bibi of Cannanore and H.H. the Zamorin of Calicut may also be named.

MADRAS CITY is on the east coast of the Peninsula of India, in lat. 13° 4' 6" N., and long. 80° 17' 22" E. In 1881 its population was 405,848. It is the capital of a presidency, to which it gives its name, and which is under the jurisdiction of a Governor and Council.

Famine.—In 1871 there was in this presidency a population of 31,597,872, but in 1881 only 31,170,631. Between the census taking of 1871 and that of 1881, in the years 1877 and 1878, in consequence of drought, there was famine in several districts, and many died. It pressed most heavily on Bellary, Coimbatore, Cuddapah, Kurnool, Madura, Nellore, North Arcot; and Mr. M'Iver calculated the total loss at three and a half millions. In the districts most severely affected the decrease of the population was 1,751,327, or 12·8 per cent. In those not affected or but slightly affected by famine, there has been an increase of 1,288,430, or 7·19 per cent. The age returns of the census of 1881 show that the effects of the famine had been most severely felt among the very young and the very old; and besides causing deaths, it prevented births. The children who were born in 1878 and 1879, and who were begotten in 1877 and 1878, were short of 700,000 as compared with 1871; and in 1881, of the ages up to 20, there were 1,947,950, or 12·04 per cent., fewer than in 1871.

Parts of the districts now comprising the Madras Presidency were known to Europe in times prior to the birth of Christ. Dynasties known as the Pandya, Chola, and Chera were then ruling, and merchants from the west were trading; a Pandyan prince sent two embassies to Augustus, who received the first at Tarragona, and the friendship of the Romans was sought by O Kerobothros, a king of Chera or Kerala. The Chola, the *Sopas* of Ptolemy, were in power from A.D. to the 11th or 12th centuries A.D.; but in 1113, and again about 1150, parts of the Chola territory were overrun by the Singhalese.

The Kurubar, a shepherd race (kuru, a sheep), the *Sopas vopades*, of Artakur (Arcot) of Ptolemy, formed a federal community of 24 states, with castles, which were destroyed by one of the Chola kings of Tanjore in the 5th and 6th centuries, and he established a new capital at Conjeveram; but to the present day the country people point out the Kurubar-Kot or forts which that shepherd race had constructed. Since the Chola fell, this southern region has seen a Hindu dynasty at Bijanagar, the Muhammadan Adal Shahi of Bijapur, the Hindu Mahrattas who succeeded to Tanjore, with Hindu princes in Cochin, Calicut, and Travancore; and from the 15th to the 18th century, several races were striving for dominion. Muhammadan rulers, Mahratta armies, Polygar chieftains, and the Dutch, the Portuguese, the French, and the British, all took part in the strife, till the British, the Muhammadan dynasties of Hyderabad and Banaganapilly, and the Hindu *rajas* of Mysore, Travancore, Cochin, Pudukottah,

and Sandur alone remained as dominant powers. The Pandiya, the Chera, the Chola, and the Kandya kings of Ceylon have all disappeared.

The north-east parts of the Peninsula have also had many dynastic changes. The Andhra dynasty ruled at Chicacole and Rajamundry prior to the Christian era. Pliny says they had 30 fortified towns, an army of 100,000 men, and 1000 elephants. The Kesari, lion kings, ruled in Orissa. The Chalukya Rajputs of Rajamundry succeeded a Buddhist dynasty, and subsequently the Ganapati of Warangal, the Vema Reddi, the Rayel of Bijanagar held sway; and the Chalukya of Kalian were overthrown during a time of religious war, when the people adopted the Lingaet teaching of the Jangams.

This presidency has an area of 141,001 square miles, with a population of 31,170,631, viz. 15,421,043 males, and 15,749,588 females, being 221 to the square mile. The most numerous races under Madras rule are the Tamil and Teling, with parts of the nations speaking Malealam, Canarese, Tulu, and Uriya; all of these are occupying ancestral lands, many from unknown times, and to them have to be added a quarter of a million of landless people speaking Mahrati, and over half a million speaking Hindustani.

Tamil was the language of three of the ancient dynasties who have been named. The Chola of Tanjore and Combaconum were settled on or near the Cauvery and Colerun rivers, and gave their names to the Coromandel or Cholamandel coast. The Pandiya capital is now occupied by the inhabitants of Madura; and the Chera ruled at Kerala on the Malabar coast. The Kurumbar, also, about the commencement of the Christian era, was briefly dominant in Southern India, and the Idayan herdsmen race still form a numerous portion of the Tamil-speaking people.

Mr. Taylor is of opinion that Tamil was cultivated in its purity in the ancient Pandiya kingdom. It is now spoken in the extreme south, south-east, and in Ceylon, throughout the vast plain of the Carnatic or country below the ghats, termed the Carnatic Paen Ghat by the Muhammadan sovereigns and by the British who have succeeded them. The Tamil-speaking country extends from Cape Comorin to Pulicat, 30 miles north of Madras, and inland from the Bay of Bengal to the Eastern Ghats. The Tamil skirts all the eastern frontier of Mysore, is also spoken over the Bara Mahal, Salem, South Arcot, Chingleput, Tanjore, Trichinopoly, Madura, Tinnevely, Coimbatore, and Combaconum, meeting with the Malendun at the Gap of Palghat. It is spoken also in the southern part of the Travancore country, on the western side of the ghats, from Cape Comorin to the neighbourhood of Trevandrum; also in the northern and north-western parts of Ceylon, where Tamilar formed settlements prior to the Christian era, and from whence they have gradually thrust out the Singhalese.

The Tamil was the earliest developed of all the Dravidian idioms, is the most copious, and contains the largest portion of indubitably ancient forms. It includes two dialects, the classical and colloquial, the ancient and the modern, called respectively the Shen Tamil and the Kodun Tamil, which so widely differ that they may almost be regarded as different languages. The people at present speaking Tamil are, as regards

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social customs, the least scrupulous or superstitious, and the most enterprising and persevering race of Hindus, and swarm wherever money is to be made, or wherever a more apathetic or a more aristocratic people is waiting to be pushed aside. The majority of the Hindu religionists found in Pegu, Penang, Singapore, and other places in the east, where they are known as Kling, are Tamil. Ali throughout Ceylon the coolies in the coffee plantations are Tamil; the majority of the money-making classes, even in Colombo, are Tamil; and ere long the Tamilar will have excluded the Singhalese from almost every office of profit and trust in their own island. The majority of the domestic servants, and of the camp-followers in the Madras Presidency, and the half of its army, are Tamil; and the coolies who emigrate so largely to the Mauritius and the West India Islands, are mostly of the Tamil people. Including the Tamil in the military cantonments and distant colonies, and those in South Travancore, Northern Ceylon, and excluding all Muhammadan, Teling, and Brahman residents of the Tamil country, who amount to at least 10 per cent. of the whole population, the people who speak the Tamil language are estimated at about 16 millions. The Tamil people are, generally speaking, dark coloured and short statured, energetic, fiery, and quarrelsome, but not vindictive. Many of them have embraced Brahmanism, but the low castes and fragmentary tribes have a spirit and a devil worship, and worship the local deities called Ammun.

Telugu is spoken on the eastern borders of the Peninsula by about 17 millions. The people are a taller and fairer race than the Tamil, many of the more northern of them being equal in stature to the Aryan Hindus of the north. They are more Brahmanical than the Tamil races, and are as energetic as the latter, though less restless.

Canarese people are about 7 millions in number, chiefly in the centre of the Peninsula; they are a tall and dark but singularly graceful race.

The Teling and Canarese are almost of similar physical frame, but, as a rule, the Teling are fairer. The great similarity of the two languages Canarese and Telugu justifies the opinion that the people are of the same stock, and that circumstances have modified their characters and personal appearance. The table-land occupied by the Canarese, from the southern part of the Mysore country, through Bellary in the Ceded Districts up to the Tumbudra, is arid, and the soil yields as food crops small millets,—*Eleusine corocana*, *Setaria Italica* and *Germanica*, *Panicum Italicum*, and *Panicum spicata*,—which even the labourers of the south of India only use on pressure when scarcity or dearth prevails.

Malcalam is spoken in the south-west of the Peninsula by about 4 millions; Tulu, on the west seaboard somewhat to the north, by about 30,000.

Kodaga is spoken by the people of Coorg, 160,000 in number.

On the Neilgherry Hills are the Kota, about 1000 in number, the Toda about 1360 in number, the Badaga, another small tribe, and Kurumbar and Irular who dwell on the slopes of the mountains. In the interior of the Peninsula are the Goud, and on its N.E. border the Khond, Kund, or Ku, all of whom are estimated at half a million of souls. Amongst these larger nations

smaller tribes are intermixed, some of them living in forests or migratory; some have preserved their ethnical identity in sequestered wilds, others have merged as helot castes of the lowland Hindus, and these now fragmentary peoples form the debris of widely-spread primitive races.

Seventy-three languages are enumerated in the schedules, of which 48 are Asiatic and 25 non-Asiatic. Those principally spoken are five Dravidian tongues, Tamil, Telugu, Malenlam, Canarese, and Tulu, viz. 28,863,267, or 92.56 per cent. Uriya, Urdu or Hindustani, and Mahrati are spoken by Uriya, 1,128,495; Hindustani, 696,103; Mahrati, 230,006.

Madras Presidency Languages.

Hindustani,	695,510	Chentau,	70
Telugu,	11,754,946	Singhalose,	36
Tamil,	12,382,220	Kodagu,	36
Mahrati,	229,777	Bengali,	306
Canarese,	1,299,839	Burmese,	238
Uriya,	773,159	Sindi,	37
Malcalam,	2,366,181	Pushtu,	76
Gujerati,	6,638	Marwari,	298
English,	35,636	Baluchi,	67
Hindi,	2,691	Nepalese,	293
Tulu,	426,222	No-war,	1
Cutchi,	366	Kashmiri,	4
Yarkala,	21,984	Punjabi,	13
Sanskrit,	1,306	Arabic,	721
Putnool?,	61,735	Persian,	1,807
Khond,	58,205	Chinese,	40
Savara,	31,933	Portuguese,	3,611
Lambadi,	21,961	French,	625
Gadaba?,	12,041	German,	298
Kurumba,	3,886	Hebrew,	25
Todawa,	1,499	Turki,	12
Badaga,	1,019	Dutch,	31
Ionla?,	316	Unspecified,	972,072
Kota,	206	Swedish,	19
Yunadi,	148	Spanish,	4
Gayati,	87	African,	3
Lada,	84		

There were 19,044 different caste names returned. The Vellalar alone were returned of 54 subdivisions and 3389 caste names. The Satani, a Hindu sect of the 16th century, have already seventeen divisions.

Since the middle of the 19th century, the tendency with the Tamil and Teling Hindus has been to mark themselves as belonging to particular families, in imitation of the Brahmans of Southern India, all of whom know the got or founder of the section to which they claim to belong. The following are the more numerous of the castes and races in the Madras Presidency:—

Ambalakaran,	155,537	Kurumbar,	114,381
Ambattan, barbers,	342,335	Lingaet,	117,616
Agamudayan,	302,339	Madiga,	1,126,748
Balaja,	780,732	Mahrati,	65,785
Besta or Valayan,	724,480	Maravar,	256,304
Brahmans,	1,122,070	Muhammadians,	1,933,571
Christians,	711,072	Mutraj,	132,266
Devangulu,	136,905	Nair,	335,320
Forest races,	1,752,535	Nattambadi,	106,082
Idaiyar,	1,072,351	Neilgherry races,	30,001
Gouda,	144,073	Oddar,	363,422
Kaikalar, weavers,	322,722	Padayachchi,	376,847
Kalingalu,	100,564	Palli,	1,255,049
Kallan,	397,900	Parayan,	3,223,028
Kamma,	796,704	Rajputa,	13,915
Kamsala,	692,300	Reddi,	499,462
Kannakun,	102,472	Satani,	625,455
Kapu,	1,102,274	Sale,	206,627
Pakanati Kapu,	107,341	Senian,	107,163
Komati,	360,715	Shanan or Idiga,	1,478,000
Kummara or Kushavan,	203,975	Shembadaven,	873,448
Kuruba Golla,	180,557	Shetthi, traders,	235,169
		Telugalu, Vadagar,	609,138

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Uparavan,	104,985	Vannian,	1,075,505
Uriya,	101,206	Valama,	348,061
Vaniyan, Gandia, . . .	316,694	Vellalan,	1,625,895
Vannan, washermen,		Kongado,	143,010
Yadavalu,	528,535	Yadavalu,	105,426

Neilgherry Hill tribes, in 1871, were 30,001.

Badaga,	24,130	Kurumbar,	3,185
Toda,	675	Iralur,	946
Kota,	1,065		

Forest, etc., races.

Jatapu,	63,337	Oddar,	363,422
Koravar,	55,645	Kodulu,	241,090
Kondulu, hillmen, . . .	63,249	Savaralu,	131,463
Malayali,	69,396	Uparavan,	104,985
Vedan, hunter,	51,854	Uriya,	101,206
Yenadi,	66,099		

The *agricultural* races in Telingana are the Velama, the Reddi, the Kamma, the Kapu, the Balija, the Pakanatti, the Naidu. The Tamil cultivators are the Vellalar and a smaller number of the pastoral Idaga; those of the Mahratta districts are the Kunbi, and further north Kurmi.

In Malabar and Malealam the Nair are the chief husbandmen, but in the Canarese districts the Vakkali, and in Canara the Bant and Nadavar. The Teling cultivators have spread into all the western and southern lands. These follow the Brahmanical doctrines, maintain the caste observances of purity and impurity, and have adopted the early marriage customs and other institutions of Menu. They are essentially agriculturists, but they take military service, engage in mercantile transactions, or enter the civil service of Government. Tamil and Vallalar were brought from the Cauvery river by the Chola kings, who conquered the Kurumbar and eradicated Buddhism. They now occupy the whole of the Coromandel coast in its southern part, and have many agrestial slaves. They had many slaves before leaving the Cauvery, and doubtless added to them during the persecution of the Kurumbar race.

The religious sections of the people are as under:—

Hindus,	28,497,666	Jews,	30
Muhammadans,	1,933,571	Theists,	13
Christians,	711,072	Kodaga,	2
Jains,	24,962	Agnostics,	1
Buddhists,	1,546	Others,	69
Parsee,	143	None,	5
Brahmo,	132	Not stated,	1,419

The Hindus are returned as under:—

Saiva,	15,399,686	Lingaet,	64,580
Vaishnava,	10,494,408	Others,	2,538,992

The Saiva Brahmins arrange themselves as—Aradhya, Namburi, Smartta, Velnati, Vaighnasulu, and Uriya. The Vaishnava Brahmins are—Madhava, Sri Vaishnava, Andhra, and Golconda. The Telugu Brahmins—Murikinati and Niyogulu. (Others—Bengali, Gouda, Konkana, Gujarati, and Maharashtra.

The *Muhammadans* (1,933,571) are largely descendants of the soldiers that have overrun the Peninsula, but a large number belong to Arab and Persian traders who have settled in the country, and many of the Labbai and Moplah section are from the offspring of Hindu mothers.

Arab,	3,736	Syud,	23,386
Labbai,	30,182	Shaikh,	54,670
Moplah,	495,714	Others,	217,238
Mogilul,	1,235	Not stated,	1,092,037
Pathan,	15,373		

They are almost all of the Sunni sect.

The *Christians* of the Madras circle are numer-

ous. One of the primitive Christians seems to have arrived in the south of India in the early years of the Christian era; the Portuguese fleets brought from Europe many missionaries, amongst them St. Francis Xavier; Robert de Nobilibus, Britto, Beschi, Dubois, and others have been striving to convert the people. The Romish church has several vicariates, and the Portuguese priests attend to much of the coast line; the French have a vicar-apostolic in Mysore, and their priests are also in the Northern Circars and in the N.W. Provinces; while the Italians occupy Hyderabad and Native Burma. Since the closing years of the 17th century, Protestant Christians of all denominations from Europe and America, amongst them Ziegenbald, Schwartz, Rhenius, Caldwell, Duff, Mason, Anderson, have been zealously endeavouring to educate and to proselytize, and these efforts have resulted in 1,862,634 Christians in all India:—

Madras,	711,080	N.W. P. and Oudh, . .	47,673
British Burma,	84,219	Central Provinces, . .	11,973
Coorg,	3,152	Central India,	7,065
Bombay,	145,154	Ajmir,	2,225
Bengal,	128,135	Baroda,	771
Panjab,	33,699	Cochin,	136,361
Assam,	7,093	Mysore,	29,249
Hyderabad Dekhan, . .	13,614	Rajputana,	1,294
Bezar,	1,335	Travancore,	498,542

The *Vellalar* are shorter and darker than Brahmins, shorter and darker even than the Teling people, but they have in general well-formed countenances and graceful forms, though amongst them also occur the decidedly African lip and nose and forehead. They believe that they came from the north. They are now classed by the Brahmins as Sudra Hindus, but Southern India only became Brahmanical about the 8th to the 10th centuries, and when the Vellalar adopted Hinduism is unknown. They claim to be Vaisya, of the Buvansa or agricultural section, a claim which the other races do not admit. They are very largely agricultural, and take the honorific appellation of Mudali or first man, pl. Mudaliar. Under former native rule in Tonda-Mandalam, the Vellalar alone were allowed to hold landed property. The Vellalar are eager in their study of English, have largely obtained employment, civil and military, under the British Government, and are an honourable, moral, and peaceful race, intelligent and thrifty, and respectable in their domestic life. The designation Vellala means charitable; but their name has been supposed to have been derived from Valaumi, the Tamil word for the act of regulating irrigation. In the present day, in Tinnevely, they will not touch a plough, the Puller race doing everything for them. They do not use animal food or intoxicating liquors; they marry before puberty; their women are chaste; polygamy is almost unknown, the widows do not re-marry, and they burn their dead.

Vellalar as farmers and peasant-proprietors, in the cultivation of rice, betel, and tobacco, are perhaps not excelled in any part of the world. They rarely accept a menial occupation. They are mostly of the Saiva sect, but the chief objects of their worship are village gods, and they keep the Pongal and Dipawali festivals.

The Karakatan Vellalar of the Madura Hills occupied their present locality before the Vellalar of the plains adopted the customs of the Aryan immigrants. And now, amongst them, when an estate is likely to descend to a female, in default

of male issue, she is forbidden to marry an adult, but goes through the ceremony of marriage with some male child, or, in some cases, with a portion of her father's dwelling-house, on the understanding that she may receive any man of the caste. Her children inherit the property, which is thus retained in the woman's family, the child-husband being the supposititious father. Amongst the Tamil races who have adopted Brahmanism, the Vellalar, alike in numbers and in social rank, take the chief place. The Christian converts of the Vellalar retain their Kudmi or scalp-lock of hair.

The *Teling* races following agricultural pursuits, have very distinct characteristics. Several of them seem to be of Aryan origin, and all of them are taller and fairer than the races in the south.

The *Ailma*, or *Velana*, or *Yelmi* (258,698 in number) in the Teling country are a prominent agricultural tribe, with military proclivities, and claim to be Rajputs. They are soldiers and agriculturists.

The *Rachwar* or *Rajwar* of the Northern Circars also claim to be descendants from the Kshatriya race; they are a brave tribe, with a high sense of honour. They have been long established in the Northern Circars, and have been remarkable for the desperate acts by which they expiate a real or imaginary insult. Their name is variously written and pronounced by others, but the Teling style them *Racha* and *Racha-vadu*, doubtless a variation from *raja*, often corrupted to *Ratsawar*, *Raiswar*, or *Rowar*. They were military retainers in Mysore and in Kamaon, where they speak Telugu; they practise medicine. The *Rachwar* chiefs are a remarkably fine, handsome race. There are defects in their genealogy, but they are permitted to intermarry with the Rajputs of Rajputana.

In the middle of the 18th century, zamindar Rangaru of Bobbili had a feud with a neighbouring polygar named Vizeram Rauze, and the latter persuaded the French commander, M. Bussy, to espouse his side of the quarrel, and Rangaru was obliged to retire to his stronghold. It succumbed to the army brought against it by M. Bussy on the 24th January 1757, consisting of 750 Europeans, of whom 250 were horse, 4 field-pieces, and 11,000 peons and sepoys, the army of Vizeram Rauze, who commanded them in person. Rangaru believed it hopeless to maintain the fort against so overwhelming a force, and, calling his principal men together, he declared that it was immediately necessary to preserve their wives and children from the violation of the Europeans, and the still more ignominious authority of Vizeram Rauze. The stern determination was carried out to the fullest; the habitations in the middle of the fort were indiscriminately set fire to, and every woman and child either perished in the flames or was remorselessly stabbed in endeavouring to escape. Then those who accomplished the deed returned to die on the walls, and fell almost to a man. Rangaru himself, hastening to the defence of a tower, was killed by a musket-ball. After the capture of the fort, four of Rangaru's soldiers concealed themselves in a thicket, and three days afterwards two of them succeeded in penetrating to the tent of Vizeram Rauze, and, having stabbed him in thirty-two places, were themselves immediately cut to pieces. The great bulk of the Teling people engaged

in agriculture retain their tribal designations: thus—

The *Balijavadu*, pl. *Baljawanlu*, in Telingana, are a Sudra tribe of husbandmen.

The Sudra *Pakenatti*, *Muttatti*, and *Vellanatti* are village authorities, and take the designation of *Reddi*. A peaceful and innocent migratory race bearing the name of *Pakenatti* were found in Mysore and the Telugu country, about the beginning of the 18th century, driven from their homes by oppression.

In the Ceded Districts, the *Peracoonta Kapalu* and *Gunggeddi Kapalu* are husbandmen of the Sudra grade.

The *Gumpa Kumalu*, or *Kama-waru*, or *Kama-varu*, are Sudra husbandmen, who do not permit strangers to enter their houses, and regard their tribe as pure Sudras.

The *Naek* or *Naidu* are honorific terms applied to masters or chiefs of tribes, and many of the Teling Sudra take this honorific appellation. They are tall, robust men, fair complexioned, who are in good positions as merchants and as servants of the British Government.

The *Kapu* in the Cuddapah district do not allow the re-marriage of their widows, nor concubinage, but the latter is generally winked at to prevent the family disgrace of their becoming common; and even adultery is but little regarded so long as the offenders belong to the same caste or sub-caste.

The *Palli* race of the Cuddapah district pledge their wives as security for loans of money, and if not repaid, the woman is re-married to another man. A case of this bigamy was tried in 1876 at the Session of Cuddapah, and all the parties were fined. The husband had borrowed some money from his mother-in-law, and left his wife with her till he could repay. Having failed to pay within the prescribed period, the wife was re-married to another man. The twice-married wife, her mother, and a third party who was present at the second marriage, were held to be equally punishable as principals, all having been present at the re-marriage.

Paik of Vizagapatam are military; a fine brave race, and good shots with the matchlock. They have ten sections, viz. *Suathro*, *Bellama*, *Noula*, *Kalgina*, *Kampu*, *Kunu*, *Uriya*, *Binnakurya*, *Bosuntea*, and *Guri*.

The *Mutraj* subdivide into *Bhui* and *Mutraj*, and the *Bhui* of Telingana is classed as a Teling Sudra, who occupies himself as a palanquin-bearer; but where settled, away from his fields and agricultural pursuits, the *Bhui* is engaged in catching fish by the net.

The *Ur-bhoi-wanlu* are mercenary soldiers who serve native sovereigns. They are never found in the ranks of the British army. There are a few of them in every large town in the south.

The *Yerra Walleroo* are a *Dhangar* or herd tribe in the Northern Division.

The *Palalu*, of the Northern Circars, are agricultural labourers who are regarded as slaves to the ryots, and were hereditarily attached to and transferable with the land.

The *Agari* of Cuttack are said to be domestic slaves.

Gaita is the name of a barbarous Gond tribe in the Rajamundry district.

Naekar and *Reddi*, in Tinnevely, claim to have

been there ever since Rama's advance on Ceylon, and to have formed part of that leader's army. They call themselves Oudh Reddi.

The Reddi and Kamma Teling came from the north, and are styled by the Tamil people Varuga or Vadaga, meaning northern. According to Dr. Caldwell, they had been previously settled on the Ganges. They are a taller, finer race than the Tamil, Canarese, or Mahrattas. The Reddi are bulky, fair, handsome men, energetic and enterprising. They have advanced along the Kistna, and the rajas of Gudwal and Wanparti are Reddi. They have pushed colonies of Reddi into the Canarese and Tamil districts, and are found in small scattered communities west to Bellary, and south-west to Tinnevely, and west to Poona.

The Teling or northern agriculturists think themselves superior to the Tamil cultivating castes. In the Madura district, soon after the establishment of the Nayakan dynasty, the Teling immigrants became so numerous and so influential that the Jesuit priests of Madura regarded them with the Brahmans as constituting the chief part of the people; and at the present day the poorest and most ignorant Teling bangle seller is disposed to give himself airs, and to affect a superiority over Tamilar of considerably better position than himself.

The Kavare are a Telugu-speaking race, part of whom have migrated into the Tamil country, where they have 18 clans. Most of them are farmers, but the Baliji section are also petty traders, hawkers, and sailors. They were primarily an agricultural people, holding lands on military tenure, and working their farms by means of inferior castes.

The Reddi of the south of India are divided into 24 clans, who marry in their own clans. The temples of the Reddi and the Naekar are of a rude form; they are of the Vaishnava sect, but a brass lamp seems to be the only utensil they contain, and flowers and cooked food and spirits are offered before it; they worship demons like the Shanar. Some, also, at one place, worship a lingam. Their emblem of the Brahmanical Vishnu is an octagon pillar, and they call Vishnu Perumal or Senna Rayer Perumal. They eat all but cow's flesh. As a law, the men marry their sister's daughter, but an aunt does not marry her nephew. Sometimes the bride is a mere child of 5 or 6 years old; sometimes the bridegroom's age is no more, while the wife to whom he is married is a full-grown young woman, who, by the time her husband has grown up, has a young family of 4 or 5 children. Property descends through the issue of a son and granddaughter, uncle and niece. If a man refuse to marry his own sister's daughter, his father's property descends not to him, but to the man who marries the rejected woman.

The Reddi are married on the field, the Naekar are married in the house; a cotton thread is fastened round the woman's neck. If no son be born, they marry younger wives in the hope of male progeny, and the Rev. J. F. Mearns had known a man with five wives. They burn their dead, and offer rice to the manes. If the crows eat the offering, the state of the deceased is augured as happy. The Reddi are exclusively farmers. They speak a corrupt Telugu, but read and write Tamil. The Naekar are mostly clerks

and farmers, but are also tradesmen, brokers, shopkeepers, and the hawkers of the Peninsula are almost all Naekar.

The Naekar seem to have invaded the south of India during the reign of the Pandiyan dynasty, which they overthrew; and they held the country by allotting it into 72 portions, each under a polygar chief with military followers. The dynasty reached its highest under Tirumali Naekar. Some of the polygars appointed by them were of the Totier caste or race, and one of the chief polygars is of the Totier caste, but they consider the designation reproachful. They are known collectively as the Kombelathar, but they consist of nine families or clans, descendants of a common ancestor. They are a bold, martial race, robust and tall in stature.

Khandait were granted lands on military tenure. They resided in fortified houses, and held their lands at a quit-rent on condition of acting as a feudal militia, and protecting the lowlands from the incursions of barbarous mountain tribes. Their name is from Khandai, a sword.

The Mala race are the Teling Pariah, but the derivation of the word is not known. In the Brahmanical Puranas there is mention of a race called Mala in the N.E. of Bengal, and their country in the Midnapur district still bears the name of Mal-bhum, and it may be that the Mala were slaves whom the races now in Telingana brought with them from the Gangetic valley.

The Tamil herdsmen call themselves *Yadava* or *Idayan*, also *Go-vansa* or cowherd race. They are darker and more slender than the Vellalar, and are less engaged in cultivation. They usually take the honorific appellation of Pillai, or son of the gods, as Gurnami Pillai, a designation which is, however, also adopted by other races. In Tinnevely the Idayan take the honorific title of Konan. Pillai or Pilly means a son, but is applied to the god Vigneswara, the son of Siva and Parvati, known as Pilliar; and it has been said that three or four centuries ago Brahmans of Tinnevely took the title of Pillai, sons of the gods. The larger number worship Vishnu. A smaller part are of the Saiva sect, but in the south the village deities and evil spirits or devils are the chief objects of their worship. In some districts widows are re-married to the brothers of the deceased husband.

Kurumbar.—In the Peninsula, in the Ceded Districts and Hyderabad, the Kurumbar are dark, almost black men, of slender and spare forms; they are quite dissimilar from the Gaoi in personal appearance, wholly distinct also from the Idayan or Yadava Tamilian herdsman race, who are known in all the Tamil country as Pillai or son, and in all probability the dispersed Kurumbar or Dhangar of the Peninsula of India, some of them in towns and others almost nomade, are the fragments of the great shepherd race who held sway in the southern districts in the early centuries of the Christian era. The life of the shepherd Kurumbar is passed at a distance from towns and villages, in the open plain, or in the glens and forests, night and day watching their flocks. The *Handi Kurubar* are Kurumbar who take service in towns.

Kurumbar have caste clans, but they are not rigid in the observance of caste rules nor as to food. They marry grown-up women, which Brahmans never

do; they sacrifice to ancestors, and they have a god called Bhyrava, but have no demon-worship. They are shepherds, gardeners, labourers, weavers. Some engage in Kumari cultivation. They are quiet, inoffensive, industrious, honest, and sincere. The Kad or Red or Jungle Kurubar are mentioned by Buchanan as a poor, dwarfed tribe, employed as watchmen.

The *Dhangar* are of the Mahratta and Telugu countries, are in twelve tribes, who do not eat together nor intermarry. In the hill country of Ramgarh and Chutia Nagpur the Oraon tribe take this name, and descend periodically into the plains for labour. The *Dhangar*, in Calcutta, are labourers (Campbell, p. 33). Mr. Hodgson describes the *Dhangar* as of Mongol origin. In the south of India they are cowherds and weavers in wool. Many are settled in towns, occupied as labourers, kitchen gardeners, and dairymen, and the *Dhangar* in the south of India arrange themselves accordingly. The *Teling Dhangar* are milkmen and weavers of coarse woollens; the *Mahratta Dhangar* graze cattle and sheep, and clarify their butter into ghi; the *Bangar Dhangar* are purely cowherds.

The *landless labourers* of the Madras Presidency (Parayan, 4,439,253; Vannian, 3,751,093) number about a fourth of the entire population. They chiefly comprise the Vanniar, the Pulliar, and the Pariah; the Oddara and the Uppara, road, salt, and tank makers.

The *Vanniar* and the *Pulli* or *Palli* are the chief labouring agricultural classes of the southern districts of the Madras Presidency, particularly numerous in Trichinopoly and Tanjore. The *Vanniar* are good field labourers and excellent farm servants and cultivators. Before the British became paramount, they were predial slaves on the lands of the Vellalar and Brahman proprietary, but a large number of them are now farming on their own account, or work the lands of the higher castes on the principle of sharing half the net profits with the proprietor; others of them are simply labourers, and by taking advances from their employers are still practically serfs of the soil, from inability to extricate themselves from their indebtedness. They are, as a rule, very dark skinned, and have all the characteristics of a non-Aryan race. They now rank, however, as Sudra Hindus, and, like other Sudras, are claiming to be of the higher social rank of the Vaisya, but this is not conceded to them. The honorific suffix of Naik is used with their names. It is supposed that in former times several of the semi-independent polygar chiefs in the south were *Vanniar*.

Kanakkan in Tamil, *Shambog* in Canarese, *Adigari* in Maleali, *Karnam* in Telugu, are designations of the race who follow accounting and clerking in the Tamil, Telugu, Canarese, and Teling districts. They correspond in their avocations to the *Kayasth* of Northern India. The *Kanakkan* recognise four subdivisions,—Sir K., Saratu K., Minadu K., and Mattuvali K. And the 1881 census report showed 102,472 of the *Kanakkan* and *Karnam* race, most numerous in Ganjam, N. and S. Arcot, and Chingleput. In the early days of the E. I. Company's progress they were their brokers, agents, and interpreters. They are the hereditary village accountants.

Polygar chiefs were known in Madras as Men-

Kavalgar, and the village watchmen as *Sthala-Kavalgar*, whom the British call *Talli* or *Talli*gar, or local guardians. Of these tribes none have risen to general power, but they established many small principalities in secluded places, and by siding with the larger powers they retained their petty sovereignties,—the *Beder rajas* of *Bednore* or *Nagar* in *Mysore*, of *Harponhalli* in the *Ceded Districts*, of *Beder Zorapur* in the *Doab* of the *Bhima* and *Tumbudra*, the *Matta Rachawar* of *Carvatinagar*; the *Kallar* chief of the *S. Arcot* district, styled H.E. the *Tondaman Raja* of *Puducottah*; the *Maravar* chiefs of *Ramnad* and *Siva Ganga* in *Madura*, and others in the south, some of whom claimed the privilege of coining money. Towards the close of the 18th and beginning of the 19th century, the British Government required to reduce several of the polygar chiefs. In 1802-3 *Kotta Bomma Naik*, the dumb chief of *Panjalam Kurchi* in *Tinnevely*, thrice beat back British detachments, and was at last subdued by a small army with Europeans and guns. If the British arms were otherwise engaged, these tribes would instantly rise as the *Gujars* and the *Beders* of *Zorapur* did in the revolt of 1857.

Shanar or *Shanan*.—Three palms of British India, the coconut tree, *palmyra* tree, and *date* tree, furnish the greater part of the palm wines, which are largely fermented and drunk by the people, or from which sugar and an alcoholic spirit, as also vinegar, are prepared. The palm-tree cultivators of the Madras Presidency in 1881 were 1,478,660 in number,—*Billava*, *Eruvan*, *Gavundla*, *Hale Paika*, *Idiga*, *Indra Kavisian*, *Shannan*, *Segudi*, *Sondi*, and *Tiyar*. Those of the *Travancore State* were 508,692 in number,—all the *Paraven*, *Nulian*, *Thundan*, *Elaven*, and *Shannan*. The dry, rainless tracts of *Tinnevely* bring to perfection the *palmyra* tree (*Borassus flabelliformis*). *Western India* and *Ceylon* produce the *cocoanut* tree (*Cocos nucifera*), which grows with most luxuriance within reach of the salt air of the ocean; and the *date* tree (*Phoenix sylvestris*) is seen all over the south of India in patches, and extensively in parts of the *Dekhan*, of *Northern India*, and of *Bengal*.

The *Shanar* race in *Tinnevely* and the south of the *Peninsula* have a tradition that they came from the north of *Ceylon*. They are everywhere a hard-working, industrious people, traders, cultivators, toddy-drawers, distillers, eating freely of fish and flesh, and drinking the toddy or palm wine. They are dark skinned, with low foreheads, sunken eyes, and prominent cheek-bones, timid and superstitious; are not so good-looking even as the *Maravar*, either as to physique or features. In the sandy sea-coast wastes of the south of the *Peninsula* they have widely extended the cultivation of the *palmyra* tree; they claim a seigniorage over these tracts, and they are largely occupied in extracting the palm wine. A man will attend to about 50 palm trees. *Travancore Shanar* women lately wished to cover their bosoms, and their attempt to do so was interfered with by the *Nair* race. More than one-half of them profess Christianity of the Protestant or Romish Churches, and the other half follow demonology, with the usual bloody sacrifices and devil dances. In *Tinnevely* and *Canara* they are largely devil-worshippers. In *Malabar* they worship some local deities; but in *Tinnevely* very many of

them have become Christians. Some of them from Tinnevely have graduated in the Madras University, and the position of the race is improving. Of the Travancore palm cultivators, the *Elaven* and *Paraven* are also called *Shogan*, also *Valen* and *Elava Panikar*. These correspond to the *Teyar* of Malabar, and members of this community are amongst the most respectable of the Travancore people. The *Shanar* of S. Travancore correspond to the *Elaven* of N. Travancore, and are even a more enterprising class. The *Shogan* appear to be the *Chego* race of Malabar, noticed by Wilson as the *Chegavan* or *Chckavan*, whom he describes as a man of low caste, commonly a *Teer*, one whose occupation is drawing toddy. In civil war or rebellion, the *Chego* were bound to take up arms for the sovereign; and some princes employed them as soldiers if they had not a sufficient force of Nairs. The *Chego* are subdivided into two sections, the *Chego* and the *Twen Chego*.

The *Shanar* have many of the characteristics of the aboriginal tribes, worship devils or local deities; but in Tinnevely, where many of them have become converts to Christianity, the contrast is great between 'Martha,' the native Christian *Shanar* girl of to-day, with her neat attire and good education, and poor 'Chodalee' of former times, before Rheinius and his fellow-labourers Christianized Tinnevely. Sir Walter Elliot considers the *Hala-Paik* of Sirci in Upper Canara, and the *Bilawari* below the ghats, to be nearly allied to the *Shanar*.

Teer, *Teyar*, *Tiar*, *Eygoorer*, or *Jarer*, the toddy-drawers of Malabar, follow the rule of descent a matrice. The women are polyandrous, and admit all comers. Till recently treated as unclean, and compelled to move from the road when a Nair approached, they are now being educated in the Government schools, obtain service, are acquiring land, and are very well to do. They are fairer and more refined looking than the Nair. *Teer* is said to mean island, and the *Maldives* and *Ceylon* have been named as their original country. Dr. Caldwell thinks they came from Ceylon, but a *Teyar* race occurs in the *Sunderbans*. The *Teyar* of Malabar and Travancore have one wife between several brothers, but plurality of wives is also common. Physically they are a fine and handsome race, the women being particularly fair.

Kallar, *Kallan*, or *Collieri* are a tribe in the *Tondaman* country, in the *Vasanga* district, in the eighteen *palliams* or districts, and throughout the *Madura*, *Tinnevely*, *Salem*, *Tanjore*, *Chingleput*, and *Coimbatore* districts. *Calicoil* was the stronghold of the lord paramount, the *raja* of *Tondaimandalam*, the country of the *Tondaman*, which was an ancient division of the Peninsula of India, of the part now occupied by the *Arco*t and *Chingleput* collectorates. The country of the *Tondaman*, H.E. the *raja* of *Puducottah*, a feudatory chief, is now only a small tract near *Trichinopoly*.

Until late years they were so predatory that in the south of the Peninsula of India *Collieri* became the designation of a thief, and their tribal name is derived from *Kallara*, thieves, plunderers. In ancient times they seem to have inhabited the woods from *Trichinopoly* to *Cape Comorin*. *Ormo* describes them in the middle of the 18th century

as expert thieves and plunderers, and the Jesuit *Father Martin* says they were very cruel. *Pennant*, writing of them in the 18th century, says the adjacent countries are covered with thick forests, and little cultivated by reason of the savage inhabitants, the *Polygars* and *Collieri*, who may be truly styled 'sylvestres homines.' The *Collieri*, he adds, were predatory, and their government, as also that of the *polygars*, feudal. They generally sided with the *Muhammadans* and the *British* in the wars against the *French* in the times of *Clive* and *Dupleix*; but, as with the *Maravar*, they have now settled down to peaceful occupations. They are small statured and dark skinned, and their monkey-like features afforded to *Valmiki* the illustration of *Rama's* advance to *Ceylon* being aided by the monkeys.

The *Ramayana* describes the forest (or wilderness) of *Dandaca* as covering the whole extremity of the Southern Peninsula, and the rude inhabitants are designated *rakshasha* (monsters) or *vanara*. *Vanara* is from *Vana*, a wilderness, and *Nara*, a man, that is, a wild or uncivilized man; and to this sense, as to the wild races in the extreme south, Mr. Taylor thinks may be reduced the fable of *Hannuman*, the chief monkey, and that of his army. He says that those who have seen the *Collieri* and *Marava* will readily consider them to differ from all family likeness of the *Aryan* *Hindus*; and as their visages often resemble baboons more than men, it would require even less than the ardent poetical imagination of a *Valmiki* to induce the employment of an equivalent word, which would so aptly seem to convey the idea imparted by their appearance. In 1871 they numbered 354,554, the population of the *Puducottah* State alone being then 316,695.

The monkey-faced races in the south of India are all brave and martial people, with much physical power and endurance. Their habits and customs are entirely aboriginal. Nominally of the *Saiva* sect, they are mostly devil-worshippers. They usually bury their dead. They have a first and second marriage, like the *Maravar* of *Ramnad*. The titular surname of all *Kallar* is *Ambalakaren*, and they returned 155,537 in 1881. Divorce and re-marriage of widows are allowed. Marriage of near relatives is usual. The Western *Kallar* of *Madura* are polyandrists. It constantly happens that a woman is the wife of either ten, eight, six, or two husbands, who are held to be fathers jointly and severally of any children that may be born of her body. And when the children grow up, they style themselves the children not of ten, eight, or six fathers, as the case may be, but of eight and two, or six and two, or four and two fathers.

The *Maravar* of Tinnevely are employed as *Kavalgar* or watchmen, but almost every case of highway robbery in that district is traced to this race. They were formerly the most martial tribe of the south, and held their lands under military tenure. They were numerous and powerful in *Madura* and *Tinnevely* even after *British* occupation, but they are said to be disappearing. Their widows re-marry; divorce is easy. In their daily life they use all flesh meats except that of the cow, and drink spirits. They were long predatory, but they have settled down to agriculture, and some of them have property. The *zamindar* of *Ramnad* is a *Maravar*. They also occupy *Shiva-*

ganga. Their district has been surmised to be the Marullo of Cosmas Indicopleustes, which was on the continent opposite Ceylon.

The Maravar men wear ear-rings, and by pulling, elongate the lobes of their ears. The women insert massive ornaments in the lobes of the ear till a perforation is made an inch wide, and the ear sometimes comes down to the neck.

They worship local deities, demons, and evil spirits, to whom they offer liquor, flesh, and fruits, and practise divination and sacrifice; and, on the occurrence of a small-pox or cholera epidemic, the whole village is excited, and devil dances are common. They are a robust, hardy, dark-skinned, stalwart race, athletic, with well-developed muscles, active, of moderate height, the cranium rounded, narrow in front, forehead low, eyes large and full. They are employed as village watchmen, and are honest to their employers, but have been largely given to thieving and gang robbery. The men do not wear turbans. They wear their hair long, and arranged like the women of the Dékhau.

The Maravar women of Rannad and Sivaganga wear cloths of 25 or 30 cubits in length, folded in plats, which they fasten behind. This is unlike other Hindu women, whose cloths do not exceed twenty cubits, and are fastened on the right side in front. In their marriages, disparity of ages is not considered, nor is the presence or assent of the bridegroom necessary,—a blade of wood in his absence serving as proxy. They intermarry, some of the subdivisions not marrying into the father's family; but Hindus in general intermarry with the mother's relations. In Rannad and Tannevelly, the titular surname of all Maravar is *Dever*.

Beder.—In the tract lying between the Mysore, Hyderabad, and Mahratta territories are several petty sovereignties, such as the nawab of Banaganapilly, a Syud family, in the east of the Ceded Districts. Until 1839, the Pathan nawabs of Kurnool ruled on the right bank of the Tumbudra river. Further west, the Reddi chief of Gadwal, the Mahratta chief of Sundur, one of the Ghorpara family; the Kshatriya raja Narupati of Anagoondah, who claims to be the descendant of the great king Rama of Vijayanagar, who was overthrown by the combination of the Muhammadan kings of Golconda, Kulbarga, Bijapur, and Ahmadnagar; the Pathan nawabs of Shahnoor, the Ghorpara chieftains of Gujundargah and Akalkot, and at Ghoorgontah and Beder Zorapur are the descendants of that Beder soldier Pid Naik, to whom Aurangzeb, for aid given at the siege of Bijapur, granted a small territory in the Raichore Doab. The Beder race have only these two small sovereignties, and some of them in Zorapur are tall, well-made, robust men.

The Beder of Beder Zorapur drink spirits, eat the hog, crocodile, porcupine (*sarsal*), manis (*uli*) iguana, bullock, cow, buffalo, cat, rat, bandicoot (*Mus gigantea*), and jerboa rat.

Prior to the Muhammadan invasion of the Peninsula, the Beder race seem to have been settled in the northern part of Mysore under successive dynasties, and they do not appear to have advanced north of the Bhima river. They were numerous in the doab between the Krishna and Tumbudra rivers, and the Beder principalities of Gurgunta, Jalihalli, and Deuhüg protected the

line of the Krishna. In the Raichore Doab also were Beder principalities, at Kankari, Adoni, and south of the Tumbudra at Chittaldrug, Harpanhalli, and Zorapur, the last of which rose to considerable power during Aurangzeb's reign. The Beder of Zorapur rose in the rebellion of 1857.

The Beder race in parts of Mysore, 260,000 in number, form a considerable part of the population, and have many polygarships, and 26,761 in the Madras districts. Some of them have become Muhammadans. Their name is variously written, and pronounced Beder, Baida, Baidera, Waida, Vedda, Vedar, Veddar, Vedan, Bedan, and Berad. They are the race who gave their name to the Pindara who harassed Central India for nearly 100 years.

The *Pindari* are mentioned in Indian history as early as the commencement of the 18th century. Several bands followed the Mahratta armies in their early wars in Hindustan. They were divided into durras or bands, commanded by sirdars or chiefs, and people of every country and of every religion were indiscriminately enrolled in this heterogeneous community, a horse and sword being deemed sufficient qualifications for admission. A common interest kept them united. Some of the chiefs acquired wealth and renown in the Mahratta wars; they seized upon lands which they were afterwards tacitly permitted to retain, and transmitted, with their estates, the services of their adherents to their descendants. The predatory Pindara bands were all broken up and the members dispersed at the close of the third Mahratta war, during the Marquess of Hastings' administration.

The *Kammalar*, or artisans, are also called in Telugu Kamsala or Panchala, the last name being given to them because of their five trades,—goldsmith, coppersmith, blacksmith, carpenter, stone-cutter. Those of the Tamil and Telugu country respectively intermarry with their own country artisans. They number in Madras, 602,300. The Brahmanical caste system ranks them as Sudras, but in the Madras Presidency they wear the sacred thread, and maintain that they are of higher origin than the modern Brahmans, and many of them add 'Achari,' religious teacher, to their names. According to Mr. Sherring, the Mahratta goldsmiths also claim to be allied to Brahmans; and in the south of the Madras Presidency, some Kammalar call themselves Visva Brahmans. They do not, however, have Brahman teachers. They are nearly all of the Salva sect, but they worship Kamatchi Amma, Kall, and village gods. They bury their dead in a sitting posture; to obtain which, as death comes on, they raise the upper part of the body against a wall, to which by a peg or nail they secure the head. The Vaishnava artisans burn their dead. Most of the artisan races are skilful workmen, and, since the opening of railways and other public works in India, they have all been earning double their former wages. They are quiet, docile, and respectable men, but they detest Brahmans, have their own guru or priests, and their own books. They have as an idol a figure like a sitting Buddha. Sir W. Elliot supposes them to be the descendants of Buddhists, partially converted under persecution to an ostensible Brahmanism. They form the chief of the left-

hand castes, and their followers are the Pallar, with the leather-workers and tanners. The right-hand castes are led by the Brahmans, and their followers the Pariah lead the van, and beat their drums when they come to blows. The points on which they now differ or stickle for are trifles.

Chetty, Chettiar, Setti, or Chitty, of the Telugu and Tamil districts, number nearly a quarter of a million (235,169). Their designations are dialectal variations from the Sanskrit *Sreshthi*, and Hindi and Mahrati *Seth*, *Seti*, and *Shet*. It is applied in the south of India to all the races engaging in trade, banking, or mercantile transactions, though many of them enter Government offices. They claim to be the Vaisya section of the Hindus, but they are of varied origin, few of them eating together or intermarrying; some of them large, bulky, xanthous-coloured, intellectual men, and others short statured and of mean physical appearance. This may be judged of by mentioning that there are ninety different clan designation of the Chetties of the Madras Presidency, one of which is again subdivided into upwards of one hundred sections. In 1871 there were 16,948 Chetties in Travancore, divided into sixteen sections. They all add the honorific term *Shet* or *Seth*, or *Chetty* or *Chettiar*, to their names, as Jagat Shet, Vencata Kistnamah Chettiar, as indeed do the Parsee and the trading Bohra, Mehman, and Khojah Muhammadan.

In the Madras Presidency they are essentially traders, and take their designation from their origin, as Marwari Chetty, Gujerati Chetty, etc. The Komati Chetty claim to be Vaisya Hindus; the meaning of Komati, their designatory name, is not known. They wear the sacred thread. They are of the Saiva and Vaishnava sects, but many worship the goddess Kamatchi Parameswari. Many are landholders.

Natu-Kothiar, of the south, all speak Tamil, and follow Brahmanism; are large spice merchants, and all of them have the marked African protruding lips and nose sharply cut at the forehead. They are keen, active traders, but grasping, with no public spirit. They seclude their wives.

Weavers.—The Tamil castes of weavers are the Kaikalar or Kaikilan, and they numbered in 1871 above a million. About half the men are employed in the construction of textile fabrics and dress, in which they are aided by their families. The number of looms continues steadily to increase. The great number of the agricultural labourers weave coarse cottons and woollens in the interval of their field work. The designation Kaikkil means to undertake, but those engaged in special branches of their trade are in Tamil called *Seringar*, *Jendraver*, *Saliyar*, *Sedan*, and *Silupan*. Their names in Telugu are *Salay*, *Padmay-Salay*, *Jendrar*, *Thokata*, and *Devangalu*, about 400,000 in number. These have, however, numerous subdivisions, and the weaver colonists from northern countries who are settled in the south hold no intercourse with the southern weavers. In every large town there are colonies of silk weavers, *Patnulkar*, whose ancestors originally came from Gujerat, fair, handsome men and women, their chief men dealing in raw silk, and well to do. 62 per cent. of the southern weavers profess the Saiva religion, but worship village deities and demons. They are addicted to drink.

The women and children all work at the loom; the fly-shuttle is not as yet in use. Their numbers are increasing; some allow widows to re-marry. The weavers of the Chingleput district devote their eldest daughter to the service of the temple.

Shembadaven or *Fishermen*.—Several races in the Madras Presidency follow this occupation. They number 873,448. The Tamil people call their chief race Shembadaven, but in the Canarese language and in Maleali they are called *Mukkava* or *Mukwa*, and in Telingana the fishing tribes are the *Boi*, the *Besta*, *Chapakulam*, *Patnavar*, *Mogivlu*, *Paravar*, and *Valaiyan*. They fish along the seashore, in the marine lagoons, and they spread along the larger rivers.

The *Mukwa* fishermen in North Malabar follow the rule of descent a matrice, but those in the south permit of descent of property to sons.

Paravar are a dark-skinned, almost black, race in the extreme south of the Indian Peninsula, living in villages along the sea-coast, and earning their bread as fishermen, with nets, lines, and hooks. They own canoes, which they take to sea before daylight, and return about noon. Their ancestors are said to have been converted by Xavier, and they still profess the Romish religion, but they are drunken and dissolute. Mr. Nelson mentions that the Portuguese on coming to India found the Paravar greatly oppressed by the Muhammadans, and they assiated the Paravar on the agreement that they should become Christians.

The *Boi* race, 414,810, from the northern part of Telingana, are fishermen, palanquin bearers, domestic servants. They mostly profess to be of the Vaishnava sect.

The *Pulli* have about thirty subdivisions, according with their various occupations, but these all eat together and intermarry. In Tinnevely, the Pullans are loathed by all caste races. They live by ploughing, sowing, and reaping the fields of the wealthy caste men. They are also employed as coolies in road-making and building, etc. They are not permitted to live within a Hindu village, but apart, and their hamlet is called the 'Pullacherry.' Their women never cover the upper portion of their bodies, and to do so in the presence of any other caste would be considered a gross insult. Their religion is the worst kind of devil-worship.

The *Puller*, Pallar, or Pali race in the south of India were formerly in a state of slavery, but their position is now solely dependent on their means. Both men and women work well, take part in all agricultural labour, the women in this particular vying with the men. The Puller women as a rule cannot be induced to cover their breasts. Previous to British rule, the Puller who inhabited the forests and mountainous districts of the Malabar coast were regarded by the settled inhabitants as inferior to the beasts of prey, and were not even permitted to erect houses for themselves. A shed supported on four bamboos, and open on all sides, sheltered them from the rain, but not from the inclemency of the weather. They dared not venture on the public road lest their steps should defile it; and when they perceived any person approaching them from a distance, they were required to utter a loud cry and make a wide circuit to let him pass.

In Travancore, the Pullayar, about 188,916 in

number, are described as the lowest in the scale of society. They are, however, a truthful, honourable, hard-working, useful race, and are labourers in the rice lands. They speak Maleali, and are scarce in the Tamil-speaking taluks of Nanjanad and Shencottah. Until lately they were bought and sold as chattels, but are now free men, though they prefer to remain on the lands of their former master. A few of them are wandering in the Warsanad and other jungles of the Madura district.

Pariahs are supposed to be identical in race with the Malavadu of Telingana, the Holiyar of Carnatica or Canarese-speaking race, the Dher of Hyderabad and Berar, the Mhar of the Mahratta, and the Poliyar of the Maleali. The Vetti, the village servant of the Tamil people, is a Pariah. The Pariah name is supposed to be derived from Parai, TAM., a drum. Pulaiyar is the term by which they are known in Shen Tamil, and is said to be from Pulai, TAM., flesh, hence vileness; but it is more probably from Pulani, TAM., land. The Canarese term Holiyar, and the Hala-Kannadi Poliyar, are supposed to be from Holi, a field or land. But in the Kapurdigiri inscription of Asoka, which is engraved also on the rocks at Girnar in Kattyawar, and of Dhauli in Cuttack, are the words, 'In all the subjugated territories of king Priyadasi, and also in the bordering countries, as (Choda) Palaya (or Paraya), Satynputra, Kerala-putra, Tambi pani,' etc., the Paraya are named in the centre of the Dravidian group, with the Chola or Sora, Kerala or Malabar, and Singhalese.

The *Holiyar* of the Canarese believe that they were once an independent people, and had kings of their own. The Pariah of the Tamil countries also believe that they were once the most important race; and Ellis states that those of Tondamandalam in the province of S. Arcot consider themselves the real proprietors of the soil. The head Vetti Pariar at Trivalur in Tanjore carries the chouri or fan of the god Tiyyaragar or Siva, and in Madras, at the festival of Eggutal (the sole mother), it is a Pariah who puts the tali or marriage cord around the neck of the goddess.

The *Holiyar* of the centre of the Peninsula where Canarese is spoken, and in Canara, seem to be identical with the Pariah or Dher race of the other districts, and, like the latter, are predial slaves. In Coorg, the Holiyar has three branches, the Holeyaroo, Yewaroo, and Paleroo. Both in Canara and Coorg, however, they have other designations prefixed, such as Mauri Holeyaroo, Byr Holeyaroo, Murtha, Bulgi Holeyaroo, Rookha Holeyaroo, Badaya Holeyaroo; and in Coorg, Kembatta Holeyaroo. Amongst the Mauri Holeyaroo, property descends through the female line.

The *Komati*, or Hindu shopkeepers of Madras, before contracting marriage send an offering of betel to the Chakili or shoemakers; and in Vizagapatam, Brahmins go through the ceremony of asking the consent of the Malavanlu to their marriage.

The Patel or head municipal authority is occasionally found to be a Pariar in the Mahratta country. The Editor has seen one of them. The Pariar of the Tamil country are unable to enunciate some of the true Tamil vocables; they either mispronounce or omit them. The Pariar of the Tamil countries are never called Adumai or slaves.

The Pariah clans are found in every village and town in the Peninsula. They are settled in houses, their quarter being usually apart from other residents, and outside the walls of fortified places, and called Parcherry in the Tamil country. Their history is altogether unknown; they are almost wholly landless; they are often, in the villages, predial slaves, and escape from this position only in the largest towns, where labour is available.

They are labourers, servants, grooms, never are scavengers; eat dead cattle, dedicate their girls to the gods; are shamanists, fetishists, and polytheists. The Mhar are regarded by Hindus as lower in social rank than the Dher. The Mhar are not numerous, but are to be met with throughout the Mahratta country, dwelling apart outside the village, and, like the Pariah, are often part of the Baluth, being the village messenger and watchman. The mark for their signature is a staff. The Pariah are wholly different in race and appearance from the leather-working race, the Chakili, Madaga, Dhor, Chamar, or Mhang, whose mark signature is a knife. The Pariah are a willing, ready people, obliging, grateful for any little kindness, and, for the traveller, whether at midnight or midday, in sun or rain, or cold or heat, they take up their staff and move cheerfully along to show the road to the next village. Indeed, in the great tract of country forming the Peninsula, the Pariah races and the Mhar are the chief free labourers. Hindu farmers rigidly prevent their holding land, and with equal tenacity prevent those of the hamlet leaving it, lest the village lose its labouring hands. They have been really village slaves throughout the Hyderabad country. The Pariah amongst the Tamil people arrange themselves into many tribes.

Their women, in the Tamil country, are married at all ages, their widows re-marry, concubinage and bigamy are not rare, and they marry near relatives. They are addicted to drinking. Many of them are educated. Auvaiyar, a Pariah woman, is famed throughout the Tamil nation for her poetry. Also, the Kural, the most popular poem ever produced in the Tamil country, was written by Tiru Valluvar, the divine Valluvar, a Pariah. It is read and admired by Tamil Hindus of every class and creed. The author addresses himself to mankind in general, without reference to caste or creed. He enunciates a monotheism embracing all humanity. He rises above the puerilities of castes, and preaches a pure morality to the human race as a whole. Though a Pariah, he was deemed to be worthy of election to the academy of Madras, an honour usually reserved exclusively for Brahmins of learning and piety. Another Pariah poet, Kapila, author of the Agaval, has been supposed to have been a brother of the author of the Kural, and his works still hold a high place in public esteem.

Pariahs are permitted to marry into each other's families. They are regarded by caste Hindus as unclean, but they are not out-castes or men who have been expelled from other castes, but a race of non-Hindus. They are usually the serfs of the Sudra agriculturists. Those in the large towns in Southern India, in the employ of Europeans, are quick, intelligent, and active. They are emigrating with great rapidity to the West Indies, Mauritius,

Cape Colony, and the Burmese provinces, etc., where sectarian or social distinctions are unknown. There are ten castes who are lower in the social scale than the Pariah, and from these are excluded the Pallar, who dispute precedence with the Pariar. The Pariar constitute a well-defined, distinct, ancient race, independent of all others, and has its own subdivisions, its own peculiar usages, its own traditions, and its own jealousy of the encroachments of the races which are above it and below it. And the Pariah, whom St. Pierre's romance has fabled as a mild, benevolent, subdued being, whenever he has an opportunity, is as severe on other sects as from the custom of the world we would surely expect. Some of them devote their young women to the gods, but the practice is followed for money, and is generally regarded as vile.

The *Dher* of Hyderabad worship all the heathen deities; they are eminently polytheists, but they also worship the elemental rain water, as the Meghoba (probably Mrigh), as a deity; and at stated times make a lamp-stand of dough, on the top of which they place the ghi pipkin as a lamp, with ghi or clarified butter and a cotton wick, which they light and worship, putting cakes before it. Many of them worship departed spirits, most of them evil, some of them good spirits, and others which they designate devils, and which appear only at night, as *saya* or shades. All believe in transmigration, and one man mentioned his hope to be re-born as a Muhammadan. They are monogamic.

The Pariah aid in cultivation and reaping, yet if they touch cooked food it becomes unclean.

The Pariah of the Panjab are fine powerful men, and tolerably good looking. Native governments recognised in them a material for soldiers useful in desperate enterprises. The early Sikh reformers tried to proselytize these men, but with very partial success, though a few, as Sikhs, obtained a respectable position. Christians also have almost failed in converting them. Mr. Campbell regards those of the Panjab as Aryans.

Every Jat village in the Panjab has a Pariah quarter, where the low-caste people reside along with the Chooras. They are the ordinary labourers, who do the inferior coolie work.

The *Dher* are few north of the Satpura range, south of the Nagpur road. The Berar *Dher* class themselves as *Andhwan*, *Somassi*, *Wad*, *Larwan*, *Laryan* or *Larron*, and *Tirwan*. The *Somassi* and *Wad* intermarry. The *Somassi* and the *Laryan* *Dher* eat together, but do not intermarry. The *Somassi* *Dher* ride on horseback in their marriages, the *Laryan* on a bullock.

These ancient races have been in their present servile position for two or three thousand years. In this interval they have been the predial slaves and servants of Christians, and Buddhists, and Muhammadans, and Hindus, but they retain their shaman and fetish customs, into which they have infused little, if any, of the creeds of their successive masters.

Koragar are described as a race in South Canara who are still sold as slaves. They are physically strong, with a forehead of moderate size, and black skin. There are three clans, - the *Ande Koragar*, *Vastra Koragar*, and *Sappu Koragar*. Under Hindu rule, the *Ande Koragar* were considered so unclean; they were not per-

mitted to spit on the ground, but had a pot suspended from the neck into which they expectorated. The second clan wear the shrouds taken from the dead, and the *Sappu* have leaves as a covering. The women cover their breasts with the leaves woven together, to which they were condemned because one of them in authority asked a high-caste girl in marriage. Their marriage ceremony consists in having water poured over them, and rice sprinkled. The *Aliya Santanam* law seems to guide them, but that of the *Makkala Santanam* is also in force, and the children are allotted accordingly. The destined slave has new clothes given him. The master takes a plate into which he pours some water, and drops into it a piece of gold. The slave takes a sip of the water, and pours the remnant on a spot of ground, which is then given over for his use.

The *Cherumar* or *Chermar* are lower in the social scale than the *Tiyar*. Should a *Cherumar* be walking along a public path, he must run into the jungle on the approach of one of the superior castes, nor can he come within 32 feet of the *Nair* or 64 feet of the *Brahman*. Some of the hill tribes of Malabar are required by Brahmins to remain a hundred paces distant; and in trade or barter he must lay down his goods, retire to the prescribed distance, and leave the payment to be adjusted by the higher rank man. The *Cherumar* were returned as 99,009 in 1871, and 64,725 in 1881.

Leather-workers are amongst the most humble of all the settled races in the south of India. They are the *Chamar*, *Madigar*, *Chakili*, or *Mhang*. They dwell outside the village walls, are tanners, workers in raw hides and in leather, shoe and harness makers, messengers, scavengers, and executioners. They are never grooms. A very few have ever been known to have the ability to read or write. The race, as a rule, are of a dark black hue, short in stature, and of very slender frame; lower limbs particularly slight, and calf and foot delicate. They still eat creatures that most races regard as unclean. In villages, where they perform the lowest menial offices, they are paid by portions of the crops and some small privileges.

In Northern India and in Bengal, the *Chamar* form the great bulk of the labourers, taking the place of the Pariah of the Peninsula. There are many sections throughout the Hyderabad country, and in Berar they are part of the *Baluth* of the village system of Maharashtra. The *Mhang* worship the leather ropes which they make. They also make cakes, which they place on the ground, and over them five stones and a lamp, and worship these. They also worship the spirits of departed men who have led evil lives. They claim the right to have for food, cattle and camels and horses that die of disease; but in the village of Dangopura, in 1866 and 1867, this point was for twenty months under litigation, the ultimate decision being in favour of the *Dher*. In the Northern Dekhan are the sections *Mhang Garoro*, *Hollar Mhang*, *Dekhan Mhang*.

The *Mhang Garoro* are also styled *Pharasti* or migrants, as they have no settled abode, but move from place to place begging. Their men and women assume other clothes, and smear their foreheads with the red kuku, a mixture of tur-

meric and safflower. They also are conjurors and sleight-of-hand adepts, from which they have their name Garoro. The men also beat the dholak when practising their conjuring tricks.

The *Hollar Mhang* are village musicians. At marriages, play on the sanna, a musical wood instrument, and beat the dafra. They are also labourers, and go messages.

The *Dekhan Mhang* make brooms and mats from the date palm; are also labourers, bring wood, marry girls under age, fall at the foot of Hanuman, but worship at a distance, being not allowed to approach. They, like the Pariah and the humble native Christian, are also prohibited approaching the house of any Hindu, but stand some yards off and intimate their presence by calling out baba, or maharaja, or ayer, and, as with the Dher, everything they have brought, and everything they touch, and the place they touch, is unclean. If it be a metal dish it is passed through fire, and if of cloth or other material it is washed, or sprinkled with water, or placed on the ground for earth purification.

They mount on horseback in procession to their marriage, a right which they prohibit the Dher and Teli or oilmen. In some parts they do not usually claim dead creatures as a right, but beg portions from the Dher.

They worship generally all the local deities or village gods,—the Ammun, the Ai, the Mata, Musoba, Mariai, Devi, Kandoba, and the Mangir or ghosts of deceased relatives. Mangir is in the form of a human being engraved on silver or copper, intended to represent a deceased father or mother; sometimes it is a casket of copper containing a silver figure of a man. The Mangir is worshipped at the Dewali and Dassara, and at Amas and full moon and anniversaries. The figure is worshipped by washing and burning frankincense. They bury or burn their dead. They place the corpse in the ground, then bring a pottul of water from the river, pour it on the body, and cover the dead with earth; after three days they take food and place it over the dead.

The *Dhor*, HIND., TEL., Dhorai, CAN., Dhorata, MAHR., are found in most of the larger villages of the Dekhan. They are tanners, but are regarded as Hindus, and, unlike the Dher and Mhang, reside within the villages. They worship the earthen jar in which the hides are steeped, placing red lead on it. They do not partake of animals that die of disease. They never devote their young women to the gods. They are looked on by the Pariah or Dher as vile, and are not associated with in eating or intermarrying. The Dher are robust, fair, short men, with well-developed chests, wide faces, light-coloured eyes, many of them with a light moustache, and in all their features they present evidence of a Mongoloid origin. They never eat the large horned cattle, the cow, buffalo, or bullock, nor do they eat dead animals, but fowls, fish, deer, goats, and sheep are lawful. They marry in their own tribe, making the marriage procession on a bullock, and say that they are not entitled to proceed on a horse. Like almost all the races of India, they worship, at anniversaries, the chief implements of their trade, which in their case is the tan-pit; but they weekly couding a small spot in their house, on which they burn incense, place flowers and wheat cakes covered with

rice, bow down, worship, and eat. The deity thus invoked one family at Oodghir said was Bawa Adam, whom they consider to be Mahadeva (Siva), and inquiry elicited the information that about 60 or 80 miles west of Punderpore is a stone named Bawa Adam or Father Adam. It is doubtless the phallic lingam of Hindus. They also worshipped Ai, mother, whom they designate as the Bhawani at Taljapore, but Kandoba at Malligaum also receives their worship. The temple guardians, however, do not permit the Dhor to approach near to the idols, as their trade of workers in skins and hides makes them unclean. They bury the dead who have fallen victims to small-pox and cholera, but those from some other diseases are burned; a pregnant woman dying is burned. They make leather from hides, and manufacture such articles as are used for water purposes, the mot bucket, the d'hol or drum, and pakhal or water bags. In Berar, workers in leather consist of 12½ clans, amongst whom are the Dhor and Kullar Bandela Chamar. The Katai make shoes and sandals, and labour in the fields at seed and harvest times. The Katai are identical in personal appearance with the Chuckler (Chakili) of the very south of India.

The Chamar in Aurangabad worship Mariamma and Sitla. They marry when under age, amongst themselves, proceeding on foot to the goddess Sitla, whose shrine they circumambulate five times. The expense is about a hundred rupees. They speak Hindi. They burn their dead.

Agambaijyar, a rude tribe in the most southern part of peninsular India. Their ordinary surname is Servikaren.

The *Totti* of the Tamil people is a village servant who waits upon the villagers. The domestic Totti does the humblest part of the house work.

Karchager, a race in the Wynad forests, skilful bowmen, dexterous in destroying wild animals.

Wild Races.—In the mountainous parts of the Ganjam district, in Jeypore, and in all the hill tract which lies between the Bay of Bengal and the Central Provinces, are numerous races who have not attained to the civilisation reached by nearly all populations of the plains. They speak their own tongues. Their tribal names are Agurtu, Balija, Erikulu, Gadabahu, Gartulu, Golla, Gonda, Janahu, Jatafi, Jond, Konda-Doralu, Konda-Rajahu, Loddli, Pamo, Pittola, Pydelu, Telega, and Yenadi.

The *Khond* occupy parts of the Ganjam district and of Orissa, between the Mahanadi and the Godavery. The Khond lie between the Kol and the Soura. They are the most numerous of the hill tribes of Ganjam. They own and cultivate the soil, and hunting game is their only other avocation. The men are of medium height, stout, strong, and not uncomely, with aquiline noses, high cheek-bones, and receding foreheads. The women are short statured, coarse featured, and not cleanly. They wear a scanty kilt-like piece of cloth reaching from the waist to the middle of the thigh. Both men and women wear a profusion of brass rings and armlets. Sir Walter Elliot says they call themselves Kuinja; their neighbours in Orissa call them Khand, and the Telugu people call them Ku, Kod, and Gond. Khandis said to mean mountaineer. The Khond, the Kol, and the Soura races have held the same

position as now since the 4th century, though some intermingling has occurred on their borders. The Kolarian races of that region have been arranged as Gadaba, Kerang Kapu, Bhumiga, Bhunijiga; and the Dravidians as Parja, Dhurwa Gond, Batra, Koi, Mاتيya, Konda Kapu, Konda Dora, Khond, Kottiya, Pentiya, Muriya.

The Khond of the northern and central parts of the Mahal or mountain country of Ganjam are skilful, energetic, and well-to-do farmers. They are in tribes, speaking different dialects, and in varying degrees of civilisation and lawlessness. The Kuttiah Khond on the Kalahundy and Jeypore borders are perhaps the most fierce and martial. The tribes occupying the hills bordering on Ganjam, with the exception of the Simili Khond tribe of Bodagada, are somewhat more civilised; and in the Gumsur Mahal, where many of them speak Uriya, there is not much perceptible difference between the Khond tribes of the hills and those living in the jungle villages at the foot of the ghats.

It became known in 1833 that the Khond race were addicted to the sacrifice of human beings (Meriah) to the earth goddess, and ever since then the British Government have made continuous efforts to suppress this rite. Since 1857, the Khond of Kinedy have been surging up from time to time, but the true reasons are not known, though those alleged are their hopes of renewing the Meriah. The Khond who occupy the eastern parts of the highlands between the Godavery and the Mahanadi, were notorious for their human sacrifices. Those near Berhampur average in height 5 feet 5½ inches, and in weight 8 stone, with well-developed muscles and tendons standing out hard and firm. They are wiry and active, have an upright gait, carry their heads erect, straight noses, narrow nostrils, thin lips, black eyes, not high cheek-bones, slightly projecting lower jaw, white and regular teeth, with oval faces, as if of a mixed Caucasian and Mongolian origin.

The Khond in the Eastern Ghats, south of the Mahanadi, have the face round, the cheek-bones somewhat prominent, the forehead full and expanded, the nose flatish and broad at the point, the mouth large, with lips full but not thick. The eye is quick and brilliant, the general expression of the face intelligent, determined, and good-humoured. In person they are muscular, neatly formed, and about the height of the races of Hindus of Southern India. The skin is clear and glossy, and it varies little in colour from a light bamboo to deep copper. Like the Gangetic tribes, they have little or no beard. They are social, and more truthful than natives of the plains, but easily excited. Animal food and palm wine, and the spirit from the *Bassia latifolia* flower, are only used on festive occasions. The deities of the Khond are the same as those of the S.E. Gond. Pen and Pennoo are common to Khond and Gond.

In the Kotiah country and round about Baliguda, buffalo sacrifices have taken the place of the Meriah. The buffalo is tied to a sacrificial pole (*Bassa-kumbo*), and the chief pujari or worshipper places his tungi seven times on the buffalo's neck, and on his giving it a final heavy blow, each of the pujari, sacrificial priests of all the other villages, who have all been standing

ready with knives in their hands, rush on the buffalo, slice off pieces from it, and, with some of its blood, each darts to his village and buries the sacrifice in the sacred grove, sprinkling the blood to the four quarters of the earth. On the following day all return to the place of sacrifice to eat the remainder of the flesh, and drink toddy to excess. The Khonds of the Boria Mutah do not follow this practice. The other Khonds sacrifice two or three buffaloes every two or three or four years, but do not bury any portions.

Khonds in the Gumsur Mahal were about 54,290. The headman of a village is styled Majji, and Patta-Majji is the designation of the headman of a number of villages. They are a finer race of men than the Soura. The Ippa tree (*Bassia latifolia*) flowers in the months of March and April, and the whole country is then given up to drinking. The Government's agent presents cloths to the Majji and to the Meriah victims rescued from the sacrifice. The family is the basis of their society, and Khond sons have no property during their father's life. On failure of male issue, the land passes to the village. The Khond are faithful and brave, boundlessly hospitable, and a guest's safety and care are paramount duties. Agriculture and war are deemed the sole honourable avocations.

A boy is married in his tenth year to a girl four or five years older than himself. In the middle of the marriage feast, at night, while the dancing goes on, the girl's uncle lifts her on his shoulder, while one of the boy's uncles does the same with the bridegroom. Suddenly the uncles exchange burdens, and the boy's uncle makes off with the bride. In a moment the festivities cease, the kinsmen range themselves into two hostile tribes, the girl's friends trying to recapture the bride, the boy's to cover her flight. The two parties carry the fight to great lengths, and the conflict exhibits an ancient custom of marrying by capture.

The *Pana* race in the Purla Kinedy and Gumsur Mahals are hill Pariahs, and each Khond village has a Pariah low-caste hamlet attached to it. Their total number in the Madras Presidency was stated to be 34,683 in 1872. The *Kandara* and *Pana* are chiefly found as agriculturists and weavers in Orissa.

Gondwana, besides the great portion under the Nizam, includes Korea, Sirguja, and Udaipur. But Gond colonies extend as far east as the Kutak (Cuttack) Tributary Mahals, where they blend with the Khand and the Saura or Savara, and they extend to Kandesh and Malwa on the west, where they touch the Bhils. A considerable portion of this tract are Gonds. The Maria are the wildest and purest of the 12 tribes, all of whom call themselves Koitor, plural of Koi.

The Koi in the hill country of the Godavery district is a numerous hill race. The Koi of Jeypore are a listless, drunken set, and bad cultivators. They are found from Jeypore southwards to the Godavery river, and westwards to Kummumet in Hyderabad.

The *Mاتيya* cultivators of Jeypore say their ancestor sprang from the soil, and point to an opening from which he came.

In 1868 disturbances rose in Keonjur in the early part of the year. It is one of the Tributary Mahals of Cuttack. The Juanga, the Kol, and

Bhuiya joined them, and at one time 20,000 were in insurrection, and it was not until August that it was put down.

Sowrah, Saur, Sabar, Sar, Savara. These varied names arise from the circumstance that in Bengal *v* is pronounced as *b*, and is constantly softened into *au* and *u*. Their principal habitat is in the mountainous country, about 200 miles long, which rises from the Bay of Bengal, and, stretching southwards from the Mahanadi, runs down from the Chilka lake to the Godavery river. They are a branch of a widely-dispersed race, who are found in Central India, in Gwalior, and Marwar, and even as far as Southern Rajputana. The name is identical with *Sairea*, applied to populations occupying the fastnesses of the Eastern Ghats, along with the *Khand* and *Kol*. The *Purla Kimedya Mahals* are principally inhabited by *Sowrah*, and the *Jalantra Mahals* both by *Sowrah* and *Khand*. These two are the chief races in the *Mahals*, but the *Uria*, the *Soondi*, and the *Pano* are interspersed amongst them. The *Soondi* are arrack sellers, and the *Pano* are a degraded race of *Uria* origin. These *Sowrah* and *Khand* are rude and uncivilised, and live by tillage and the barter of sundry forest articles. Sir Henry Elliot has suggested that the *Siviri*, the *Seori*, and the *Cheru* may perhaps be the *Saurasena*. In the *Harivansa* is the following passage:—'From this race came the *Sauravira* and *Saurasena*. The great king *Saurasena* has given his name to the country over which he reigned.'

The *Sowrah* have also been supposed to be the *Suuri* of Pliny and the *Sabaræ* of Ptolemy. The *Sabar* and *Sahar* of Pooree, Cuttack, and Balasore in Orissa, are possibly one branch, as also are perhaps the *Chensuar* farther south; these are savages armed with bows and arrows and battle-axes. The hilly tract which extends from *Purla Kimedya* to *Berhampur* in *Ganjam*, is bounded on the east by the narrow belt which separates the hill tracts from the sea, and on the west by the *Khand* clans of *Chinna Kimedya* and *Jeypore*. The *Sowrah* are believed to be prior occupants, but in habit and barbarism they bear a strong resemblance to the *Khand*. The *Sowrah* are wholly within *Telingana*, and extend from the *Godavery* to the southern frontier of the *Khand*. Their country is one of the most difficult in the world,—a hilly tract covered with a jungle as deadly to sepoys as the lowest swamp in the *Santal parganas*. They are small, mean, and very black. According to Major Macpherson, the hill tribes south of the *Khand*, and running up to near the *Godavery*, are *Sowrah*. Dr. W. W. Hunter says the *Sowrah* also now live with the *Oraon* or *Odson* of the Bengal frontier. An insurrection in 1858 was neither aided nor led by *Khand*, the principal actor in the affair was a man named *Danda Sina*, of *Garbah Goomah*, a village occupied by the *Sowrah* tribe. *Danda Sina* had some time before been apprehended by the authorities of *Ganjam* on a charge of dacoity. He was convicted and sentenced, but the sentence required confirmation, and in the interim he contrived to effect his escape. Flying to his own village, he collected a large body of his clansmen, and with 10,000 followers attacked the manager of *Purla Kimedya*. Seven peons were killed upon the spot, and though the manager escaped, the

whole country was immediately in a state of excitement. The *Sowrah* had previously been irritated by the execution of two of their number for murdering the headman of a village, and had openly threatened vengeance for their deaths. An old device was also employed to stimulate them to action, and give additional coherence to the movement. As in the *Santal* rebellion, an avatar descended, though he was not, as with the *Santal*, in the shape either of a cart-wheel or of a piece of paper. The *Sowrah* appear to be advanced beyond that point in theology, and their idol was a little brazen image. But in all other respects the device was identical with that employed among the *Santal*. The avatar issued commands, the active leader was sole interpreter of them, and the commands authorized armed resistance to regular authority.

The *Sowrah* race who occupy the hills near *Chicacole*, near *Kalahundy*, and southwards as far as *Badrachellum*, bury their dead with their weapons. The headman of a village is styled *Gomango*. The *Sowrah* in the *Purla Kimedya Mahals* are about 16,398, and 15,193 in the *Pedda Kimedya Mahals*. Half the villages are situated below the hills, and their occupants are in constant intercommunication; even the hill *Sowrah* frequent the markets of the plains, and the people of the low country no longer fear to trust themselves amongst the hills. They pay their rents to the *raja* of *Jeypore*.

The *Sowrah* who occupy the *Pedda Kimedya*, *Surangi* and *Purla Kimedya Mahals* to the south of the *Khand* tribes, have little in common with the *Khand*. In agriculture they are on a par with the *Khand* tribes.

The *Chensuar*, *Chenchwar*, or *Chentsu*, a wild, half-savage forest tribe inhabiting the Eastern Ghats of the Peninsula. They are known to their settled neighbours as the *Chechu kulam*, *Chenchwar*, and *Chensuar*. Wilson names them *Chenchuvadu* (*Vadu*, TEL., a man; *Wanlu*, *Vanlu*, pl. men). They dwell in the tract of jungle covering the westernmost range of the Eastern Ghat line, between the *Pennar* river and the *Kistna*, known locally as the *Nullamallay* and the *Lankamallay*. Those of the *Nullamallay* range seldom visit the plains, their time being occupied in the search for forest produce, roots, on which they subsist, honey, tamarind, wood-apple, game, and herbs, which they barter for grain. In the *Cumbum* district some of them earn a livelihood by guarding the crops and cattle of the farmers on the hill tracts. They are generally peaceable, but a few who live near the plains are given to petty thefts of grain. Their weapons are the bow and arrow, a bill-hook, and sometimes a matchlock. They inhabit clearings in the forest, and live in beehive-shape huts like the *African*, *Nicobarian*, and many of the ruder *Asiatic* tribes. These are of wickerwork, with walls about three feet high, and a conical straw roof, with a screen for a door. The men are almost nude, and have in general only a rag for covering, with a leather cap on their head. The women dress like the wandering female basket-makers, whom they resemble in features. The features of the men are small, but the expression is animated, cheek-bones higher and more prominent than those of the *Hindus* in general, nose flatter, and nostrils more expanded; their eyes black and piercing; in

stature they are a little shorter than their neighbours, and they are slightly but well made, except about the knee, which is large, and the leg. The colour of the skin is darker, and there seems a tendency to cutaneous eruption. They have large dogs, and a few are employed as hill police in the pass from the Cumbum to Badwail. The Nandial Chenchwar have no images. They are polygamists; they bury their dead, but sometimes burn, and, like the Tatars, they carry the deceased's weapons to the grave. They use the spear, hatchet, the matchlock, or a bamboo bow and reed arrow tipped with iron. They look on weaving and other manufacturing arts with contempt. They are patient and docile. Vocabularies of six of these non-Aryan tongues, the Khand, Savara, Gadaba, Yerukala, and Chentsu, are given at p. 39, No. of 1856, of Beng. As. Soc. Journal.

The *Patuah* or *Juanga* are a forest race inhabiting the Tributary Mahals to the south of Singbun in Cuttack, scattered in the mahals or killahs of Keonjur, Pal Lehra (30 villages), Dhenkanal (6 villages), and Hindole (6 villages). The stature of the men does not exceed 5 feet 2 inches, and that of the women 4 feet 3 inches or 4 feet 4 inches. Their forms are slight, with little muscular development, and physique weak. Their face is shorter and broader than that of the Uria, nose is flat and nostril wide. Their colour is not darker than the Uria peasant. The men are not handsome, but the women are repulsively ugly. The men dress like the peasantry of the neighbourhood; but till 1871 all the covering of the women consisted of two bunches of twigs with their leaves attached, one before and one behind, which were changed daily, kept in position by a strip of bark or a string of glazed earthenware beads passed twenty or thirty times round the waist and over the stems of the twigs; hence the name of the tribe, *Patuah*, literally people of the leaf, but they call themselves *Juanga*. The women also wear necklaces of the same kind of beads, and their hair is gathered together in a knot at the back of the head, fastened by a string with a silver or brass button at each end of it. The women wear no blanket or covering at night, but sleep between two fires. Their traditions are to the effect that they were formerly vain of fine dress, and were wont to lay aside their good clothes to prevent them being soiled, and wear such leaves when attending to the cleaning of the cow-house or other duty, when one day a thakurani, or, according to some, Sita, appeared, and commanded them as a punishment for their vanity always to wear such leaves. Dr. Shortt mentions that the legend of Killah is that a rishi commanded them to wear the leaves. They believed that if they violated these commands they would be devoured by tigers. Women dance in a circle to the sound of a large drum beaten by the men, moving round and round in the same measured step, occasionally advancing towards the musicians and then retreating, but keeping the body inclined towards the musicians. Their villages are in some clearing or opening in the forest; are small, with about six or eight families, in poor and mean thatched huts of wattle and daub, each family in its own dwelling. They have no lands, but sometimes assist in the cultivation of the neighbourhood. Their avocations are chiefly those of the chase,

using the bow and arrow and dogs; they kill deer, hogs, and not unfrequently snakes, of the flesh of which, especially that of the *Python molurus*, they are very fond. Except the cow, they are omnivorous. Their usual food is insipid and nauseous roots (*tunga*, *kurba*, and *panialu*), and the seeds of the jungle grasses. They all call themselves *Pudhan*, and have no system of caste. They pay homage to nameless spirits who inhabit the woods and mountains, and make offering to the genus loci of a fowl, a goat, or rice, or spirits. In the month Baisakh they offer libations to the manes of their deceased ancestors. They bury their dead. Marriages are arranged by the parents, and are scenes of revelling and drunkenness. They adhere to one wife, unless she prove unfruitful. Like many Hindus, they will not pronounce their wives' names. Their language is not similar to *Uriya*, and it shows that they are connected with the *Mundah* of *Chutia Nagpur*, and that their nearest kinsmen are the *Kheriah*. But in their present position they are isolated from all other branches of the family, and they have no suspicion that they are connected with them.

The *Juanga* have been said to extend into *Bastar*, and to be there called *Jharla*, and farther north to have the name of *Madia*; but these points need confirmation. The *Juang* of *Keonjur* and the *Malhar* or *Patuah* of *Dhenkanal* are identical in manners, dress, language, and habits. Hitherto, any person wearing a cotton cloth became, by so doing, an out-caste from his people. But in 1871 the maharaja of *Dhenkanal* and the British revenue officer induced the women to discard their leaves and use cloths. They rebelled in April 1868, but were subdued by the month of August. The *Juanga* or *Jowang* dwell apart from the agricultural population, and have a language of their own. They cultivate patches in the forest clearings, but they like to wander in the forest and gather its wild products.

The *Vedan*, *Vedar*, *Veddar*, or *Brdan* of the Malabar forests are predial slaves, who cut timber and do not cultivate. In Travancore and Cochin are the *Vedan* and the *Oolladen*; both tribes are hunters, and are most numerous in the mountain taluks.

The *Kadar*, a hill race, occupying the Anaimallay Hills in the collectorate of Coimbatore. They are open, independent, straightforward men, simple, and obeying their Mopens or chiefs. They are strong built and active, with woolly hair and something of the African features, and file their front teeth to a point. The women wear enormous circles of pith in the lobes of their ears, which they distend down to their shoulders. A black monkey is the *Kadar's* greatest dainty. A small number are employed by the Forest Department in forest conservancy and in felling timber, and others collect forest produce, which they barter for grain. They also cultivate for themselves, on the hills, patches of *ragi* (*Eleusine coracana*), which they supplement as a food supply with roots, herbs, etc., found on the hills.

Maleali, a race in the Shevaroy Hills, in South India and in Malabar. They inhabit the mountain tracts of the Salem district. A small body of the *Maleali* occupy the hills in the Kallakurchi taluk of the South Arcot district, and are engaged in cultivation and felling timber.

There are two small hamlets of them above Papanassam in the mountains dividing the Tinnevely district from the Travancore territories. A few in the Salem district have a rude kind of kumari cultivation, breaking up patches of land, which they abandon when the soil becomes exhausted, but residing in villages, with none of the wild habits of the people of the jungle. They have their own social rules, and their headmen are all-powerful. On hills twenty-five miles S.W. from the town of Vellore, there are thirty small villages, with a rude and uncivilised population who do not clothe themselves properly. They speak a language scarcely intelligible, but believed to be a Tamil patois. They are addicted to thieving, but live by cultivation and exchanging wheat.

The *Arian* or *Malai Arasar* or *Malai Arayan*, literally Hill Kings, are a community of 15,000 or 20,000 people in the southern mountains of Travancore. They are nomade or semi-nomade, shifting their locations to suit their kumari cultivation. Many of them live in huts constructed on trees, above the reach of wild beasts. But there are others with villages beautifully situated amongst the mountains, from 2000 to 3000 feet above fever range. They worship the *dii loci* residing in peaks, trees, and great rocks, and also the spirits of ancestors. Their priest worships the hill deity, and works himself into a state of possession. They bury their dead in cromlechs, constructed, like the cromlechs in Coimbatore, of four stones and a covering one, like those now in use amongst the Gotta tribe of Gond, on the Godavery; and in the cromlech is deposited a metal image, or an oblong stone in which the spirit of the deceased is supposed to dwell. They have sacred groves, where the greatest reverence and silence is observed. They are great hunters. They are innocent in character, are truthful and chaste in language, but are great drunkards. Their language is Dravidian. The *Malai Arasar*, in the range of ghats between Tinnevely and Travancore, are in small communities of five or six families. Those of the Coimbatore district live in the low jungles of the Pollachy and Oodalempetta taluks, and in the Bolumpetta jungles. Their huts consist of a few sticks covered with bark and thatch. They live on wild forest products, but, since A.D. 1850, they have been cultivating potatoes for their own use. They have a few fowls and dogs. As a race they are diminutive and pot-bellied, their crania small and pear-shaped, rising to a point about the junction of the occipital bone with the sagittal suture; a low retreating forehead; long, tangled, black hair, flat nose, and small eyes. They are averse to intercourse with strangers. They catch wild animals in pits and traps, and use bows and arrows. They are low in the scale of civilisation. Their principal occupation is hunting, but some of them are engaged in the cultivation of forest land. Coffee planters have been dispossessing them of their lands.

Malai Kudi, or plural *Malai Kudiar*, a hill tribe living in the jungle tracts of South Canara, in the Uppanangadi taluk, in the cardamom forest tracts, etc., bordering on the ghats. The *Malai Kudi Kunalie*, *Malai Kunalie*, *Nad Kunalie*, *Kari Kunalie*, *Kumri Mahrati*, and *Koragar*, formerly, when kumari cultivation was unrestricted, may have had their abodes permanently in the heart

of the jungles, but they have long since taken to the plains, and are now to be found everywhere, though in secluded localities.

A *Negro* race occupy the hills at Dandilli in North Canara.

The *Neilgherry Hills* are situated between lat. 10° and 12° N., and long. 76° and 77° E., bounded on the north by the table-land of Dava-rajpatnam, S. and E. by the open country of Coimbatore, S.W. by the Manaar river, a branch of the Bhowani; W. by the chain of ghats, and N.W. by the district of Wynad. The base of these mountains, including that of the Kunda Hills, covers a circumference of 200 miles. Their greatest length is from E. to W. 46 miles, and medium breadth 15 miles; the surface is composed of ridges of different elevations. The country is divided into three districts, the Peringa Naad, Malka Naad, and Thodawar Naad. The first two are mountainous, but the third is of sloping hills and gently undulating surface of table-land. Dodabetta is 8700 feet above the level of the sea. The races occupying these Naad,—the Thodawar, Buddaga, Kothur, Kurumbar, and Erular,—until the early part of the nineteenth century, remained secluded amongst their forests and on the mountain summits.

The *Toda* or *Todawar*, properly *T'uda* or *Tudavara*, live in hamlets or 'mund' on the hill plateau. Motta and Mund are words meaning a *Toda* hamlet. They never could have exceeded a few thousand, but they have diminished through opium eating and polyandria, and, at a former period, the prevalence among them of female infanticide. It is said that no girl has been destroyed since 1819. Before marriage, young people associate. After marriage, the *Toda* wife, or if there be more than one, all the wives, in a family of brothers are common to all the brothers. They claim to be aborigines, and other classes recognise the claim, and regard them as the lords of the hills, and pay them in kind, as tribute, one-sixth of the produce. They occupy the *Todawar Naad* and *Malka Naad*. Their villages are in the depths and on the skirts of the forests. Their houses are built in the form of a parallelogram, 10 feet by 6, roof semicircular, and door 1½ to 2 feet high, and 14 to 18 inches wide, and it is the only aperture. Their appearance is calm and dignified, and carriage graceful. Their colour is a deep copper hue. Their numbers in 1825 were—men, 145; women, 100; boys, 45; and girls, 36=326. Their men average in height 5 feet 3¾ inches, and average weight 121½ lbs. Nose long, large, and well formed, generally aquiline. The women average in height 60·25 inches, in weight 110·80 lbs. They are handsome and comely in feature.

The *Toda* have five sections—(a) *Peiki*, (b) *Pekkan*, (c) *Kuttan*, (d) *Kemma*, and (e) *Todi*, who eat together but do not intermarry. *Todawar* or *Torawar*, in Tamil, means herdsmen. The men carry a small axe and their cowherd staff. *Toda* women tattoo their arms, legs, and chest with dots. The men wear a piece of stout cotton cloth about 5 lbs. in weight thrown around them as a toga or mantle, descending to the knee, and their feet and head are always bare. The women have a similar mantle, but falling to the ankles, with the loin cloth (*Mundu*, TAM.) of Hindu women below it. The *Toda* do not bathe, but anoint their bodies with ghi, which soon becomes rancid.

They are dirty. The Toda women have metal and shell ornaments, with brass armlets weighing 6 lbs. The Toda lead a quiet, peaceful life. They are fond of feasting and dancing on festive occasions; all use tobacco, many use opium, and in latter years the use of arrack has largely increased. Their cemetery and place of funeral sacrifice is a pretty green spot, partially enclosed by a stone wall, and rendered very gloomy by a thick wood on one side and lofty hills on the other. It is their practice to sacrifice buffaloes on the demise of a Toda, and a strongly-walled area is set apart for the reception of these animals, whose bones and horns are strewn on the ground. At the demise of a Toda chief, the funeral procession entered the green and moved towards the centre. The deceased was dressed in a new garment and mantle, and arrayed in all the ornaments which he had worn during life. He was carried on a bier formed of branches and herbs, and followed by a number of mourners, male and female, who chanted the lament, whilst others carried wood for the funeral pile and provisions for the evening meal. A herd of buffaloes was driven into the walled area, and the men, armed with clubs, entered with exulting shouts, and performed a wild dance amongst the buffaloes. These soon became excited to the highest pitch, and, at a signal, a bell was attached to the neck of each infuriated animal. Two young men would throw themselves on the animal's neck, seize it by its horns, and others would run to their assistance, and eight or ten men would be seen hanging on the neck of one animal, whilst others increased its rage by blows of their clubs, and goaded it on with hideous yells and gestures. Three or four animals were thus attacked at one time, and the bell attached to the neck of each. But meanwhile the general assemblage which lined the walls were weeping, exulting, or sending forth shrieks of horror whenever a man was wounded, a buffalo overpowered, or a lover or a husband in imminent danger. On the next day, the victims were finally sacrificed. The men struck the animals behind the horns with a wood-cutter's axe. But sometimes the blow was indecisive, and an infuriated animal escaped and drove madly amongst the multitude. After the sacrifice, several wild dances followed, during which the men feigned to cut and lacerate themselves. On the third day, the deceased was burned on the funeral pile.

The Kotar tribe ranks next to the Toda in priority of occupation of the hills. They have no caste, and as a body are the most industrious of the hill tribes, giving much of their time and attention to agriculture, handicraft, etc. When not required at agricultural operations, they employ themselves as carpenters, smiths, basket-makers, etc., making and repairing their ploughs, bill-hooks, hoes, etc. They are also carriers, and are highly esteemed in the plains for the excellent leather they make. They perform all the menial offices required by the Toda and Badaga, supplying them with barbers, washermen, etc. They acknowledge the Toda as lords of the soil, and accordingly pay the tribute demanded by them as Goodloo. At the same time they exact from each hamlet of the Badaga within a certain distance of their own village, certain annual fees, which they receive in kind, for services rendered as handicraftsmen, etc., in addition to that of ceremonial

or festive occasions for menial services performed. They hold the best lands, and they have the right to select the best whenever they wish to extend their holdings. They are well made and of tolerable height, rather good featured and light skinned, having a copper colour, and some of them are the fairest skinned among the hill tribes. They have well-formed heads, covered with long black hair, grown long and let loose, or tied up carelessly at the back of the head. An average of 25 men gives the following measurements, etc.:—

	Men.	Women.
Age, years,	27·68	32·44
Height, inches,	62·61	57·98
Circumference of head, inches,	20·95	20·36
Circumference of neck,	11·95	10·7
Circumference of chest,	30·68	29·3
Circumference of arms,	8·76	8·2
Circumference of thighs,	15·52	14·63
Circumference of legs, . . . . .	...	35·
Length of arms,	30·	26·52
Length of hands,	7·	6·5
Breadth of hands,	3·25	3·
Length of feet,	10·	9·25
Breadth of feet,	3·5	2·25
Weight, avoirdupois, lbs.,	105·2	96·24

They have a slightly elongated face, with sharply-defined features; the forehead narrow but prominent, and occasionally protuberant; ears flat, and lying close to the skull. The women are of moderate height, of fair build of body, but not nearly so good-looking as the men. Their arms are tattooed, having nine streaks, with four dots on each arm and four circular marks on each forearm. The women assist the men at their work in the fields, and make baskets and earthen pots, etc. Their number at the last census was 1065. They form large communities, each village containing from 30 to 60 or more huts of tolerable size, walls built of mud, and covered with the usual thatch grass. The station of Kotagerry takes its name from the Kotar villages in its vicinity. The Kotar, as a body, are unclean. All the dead cattle and carrion in the vicinity, of every kind, find acceptance among them as food. Oxen and buffaloes which perish from old age or disease belong to them of right, and they carry home and greedily devour the tainted carrion which they find on the highways and in the fields. Some rude images of wood or stone, a rock or tree in a secluded locality, form their objects of worship, and to these sacrificial offerings are made; but the recognised place of worship at each village consists of a large square piece of ground, walled round with loose stones, 3 feet high, and containing in its centre two pent-shaped sheds of thatch open before and behind, and on the posts that support them some rude circles and other figures are drawn. They hold an annual feast in honour of their gods, which comprises a continuous course of debauchery and licentiousness, extending over two or three days. On these occasions they clothe and ornament themselves in their best, and make as grand a show as they can, and to witness which the other tribes are invited. Much indecent dancing takes place on these occasions between the men and women, and frequently the spirit of their deity is supposed to descend on some of them, when their frantic deeds seem to form but a branch of demonology. As a rule, they marry and live with one wife, and have a number of

children. The Kotar possess a small breed of cows, but have no buffaloes. They never, as a rule, milk their cattle, but leave it all to the calves. The Kotar keep up an annual feast in memory of their dead, when a few cattle are slain on a rude kind of altar constructed for the purpose, and on it a portion of the flesh of the animal is laid, with a little of each of the different kinds of grain they cultivate, and is consumed as a burnt-offering to their gods, in memory of their dead relatives and friends. During this ceremony the young men and maidens dance around the altar together. Whilst the younger members are thus engaged, the elders busy themselves in preparing a grand repast for their friends, whom they invite from the adjacent villages on the occasion of this annual festival. More cattle are now slain, and the flesh mixed with small portions of every kind of grain grown in their fields; a great fire is raised, and the scene becomes one of confused riot and mirth, with blowing of the kollera horn, mingled with yells and shrieks and beating of tom-toms, the confusion continuing from morning till night.

The Kotar language is a very old and rude dialect of Canarese, having the same Tamil roots, but differently pronounced, without the guttural or pectoral expression of the Toda. They are believed to be descended from some of the low-caste tribes of the plains, who in former times sought refuge on these hills from the persecution practised on them by the invaders of India. There is scarcely a useful implement connected with the mechanical arts, trade, agriculture, or husbandry, that they are not conversant with.

Every Kotar village has belonging to it a circle of Badaga hamlets or villages, from which they claim at periodical seasons the payment in kind of certain fees or dues, and for which they in return furnish the Badaga with, or rather make for them (the latter supplying the material), their implements of woodcraft and husbandry. These fees are generally paid in a certain quantity of whatever grain the Badaga has cultivated, for each plough of land, besides incidental dues on marriages, etc. The Kotar always attend the funerals and obsequies of the Toda, etc., receive from them the carcasses of the buffaloes that are offered in sacrifice, allowing from a half to a quarter of a rupee for some; and others they receive in return for the assistance they afford on these occasions, or for services which may have been performed for the family of the deceased. If they cannot supply themselves with flesh by any of these means, they kill some of their own herd, or purchase for that purpose from the other tribes. The Kotar burn their dead, collect the bones on the following day, and bury them in a hole, marking the spot where they have done so. This they do in order to the performance of the obsequies. On the night of the first Monday after the first new moon in the month of March, all the friends of the deceased assemble, and, preceded by music, go to the place of burning.

Badaga are the most numerous tribe on the Neilgherry Hills, are also called *Badakar* and *Vadakar*, meaning Northerner, but their Toda name is *Marves*, the term for a labourer. They state that about the 15th century their ancestors came from the Malusal Hills, sixty miles south-east of the town of Mysore. Their name is supposed to be

a modification of the Canarese word *Vuddaca* or North, and they undoubtedly speak an ancient but organized dialect of the Canarese; but whether famine or persecution drove them from their own country is not known. They are of fair complexion, and handsome.

Both men and women work in the fields, but of late years a large number of men find employment as labourers and artisans. The other hill tribes on the hills live in isolated communities, but the Badaga dwell in villages on a rising ground, in streets running in parallel lines, in thatched houses built of stone and mud, and divided into separate compartments, with a double tier of lofts, and with a wide terrace in front as a drying, thrashing, and winnowing floor. The doorway, 43 inches high and 26½ broad, is their only opening.

The cattle are penned in an adjoining cowhouse or shed. Dr. Shortt says they have eighteen sects. The arrangements on betrothal are made by the parents, but the marriage only takes place when grown up. Polyandry does not prevail, but divorce is easily obtained. The women look like mummies. They wrap a cloth round their bodies from below their arms to their knees, and fasten it with a cord below their arms and around their hips; the arms and shoulders and their legs below the knees are bare. A scarf goes round the head, and is let fall behind. The women are of domestic habits, are simple, modest, and retiring, and kind and affectionate mothers. Formerly they claimed as their deity *Hettee-du*, an old man, and *Herear-du*, who, they said, conducted them to the mountains; and they still have numerous deities. A chief deity is in *Rungaasawmy* peak, where men of the *Irular* tribe officiate as priests, and offerings of ghi and fruits are made; another deity is on a droog near the village of *Hollikul*, where a Badaga priest officiates; and there are other male and female gods. Many are comparatively wealthy. They can neither read nor write; they are timid and superstitious, haunted with a dread of evil spirits, and are deceitful, ungrateful, and false. They are in perpetual fear of the *Kurumbar*, to whose sorcery and witchcraft they attribute all accidents and ailments which befall themselves, their cattle and crops, and in their delusions they have killed *Kurumbar* and suffered for it. Nevertheless they get the *Kurumbar* to officiate as priests at all social ceremonial occasions. They both burn and bury their dead.

Irular or *Erular* in the Tamil districts are most numerous in N. Arcot, Chingleput, Salem, and Coimbatore. In the Neilgherries they are a low type of the Dravidian race occupying the lower skirts of the forests at the base of the hills. They arrange themselves into two clans, the *Uruli* and the *Kurutalei*, meaning rulers and serfs. They dwell in the clefts of the mountains and in the little openings of the woods. The word *Eruli* means unenlightened or barbarous, from the Tamil word *Erul*, darkness. It is the term applied to them by their neighbours, and they speak a rude Tamil dialect. They sacrifice he-goats and cocks to their deity *Mahri*, which is a winnowing-fan, and they have minor fetish objects, mero stones, that they call *Moshani* and *Konadi Mahri*. They inter their dead in great pits, 30 or 40 feet square, thatched over and planked across, with an opening about a cubit square in the centre of

the planking; across this opening are laid pieces of wood, on which the dead are placed, and covered with earth, and are left so till another person die, when the former remains and the earth are turned into the pit and replaced by the newly dead. They are scattered in small communities, practising a rude system of agriculture, which scarcely furnishes them with sufficient food, so that, when pressed for sustenance, they resort to the jungles and live on such products as they can collect. They make use of animal food of every description, not even excepting vermin and reptiles. They collect for their immediate wants as food, the wild fruits, herbs, and roots; also honey, beeswax, gums, and dyes of various sorts, and medicinal herbs and drugs, which they barter with the people of the plains in exchange for food and clothes. They are intrepid as regards the wild beasts they meet in the jungles, and in their search of honey they sometimes suffer severely from contact with wild bears. They hunt and take game of every description. The Irular in the Salem district wander through the jungles, collecting forest produce, and living upon roots and whatever they can kill, snakes, rats, and lizards even being used as food. They are simple and superstitious to a degree, and the people of the plains believe them to be sorcerers. They rarely come out of the jungle, and their headmen arrange the barter of the forest produce for grain, salt, trinkets, tobacco, and sheep, with the people of the plains. They are employed by the Forest Department in the forest conservancy and in felling timber, and those so occupied live in hamlets of bamboo and daub huts. Polygamy is allowed, and they have many children, but they die off largely from fever.

The following is the result of the weight and measurements of an average of 25 men:—

Age, . . .	26.68 years.	Length of arms, .	30.0 in.
Height, . . .	61.78 in.	Hands, . . .	6.5 "
Head, circumf.,	19.83 "	Breadth of hands, .	3.25 "
Neck, . . .	11.59 "	Length of legs, .	34.5 "
Chest, . . .	29.91 "	Feet, . . .	9.0 "
Arms, . . .	8.42 "	Breadth of feet, .	3.25 "
Thighs, . . .	15.17 "	Weight (avoir.), .	96.2 lbs.

The women are strong and stoutly built, anything but prepossessing in appearance, and very dark skinned. Their feet, of those of all the S. Indian races, are the most beautifully formed. They are fond of ornaments, and wear heaps of red and white beads about their necks, thin wire bracelets and armlets, with ear and nose rings.

In their habitats the men wear no clothing but the lungooti, but when working on plantations they wear cloths like other natives. The women wear a double fold of a wrapper cloth, which extends from the waist to the knees; the upper part of their bodies with their bosoms are nude.

Kurumbar.—Above the Irular, at heights varying from one to two thousand feet, in the clefts of the mountains and in little openings in the woods, with which at this elevation they are girt, live a race calling themselves Kurumbar. They occupy the highest range bordering on the Neilgherries. Their neighbours, when speaking of them, usually prefix to their name the term Mullu, a thorn; in Tamil they are called Kurumbar, in Canarese Kurubaru. The Toda do not consider the Irular as forming a part of the inhabitants of the hills, but they allow this designation to the Kurumbar, whom they call Kurb, their term for a

cleft or glen, and from them they receive certain services. Swarthy and unhealthy-looking in countenance, small of stature, the head but thinly covered with sickly-looking hair, the only covering it has; little or no eyelash, small eyes, always bloodshot and apparently much inflamed, pot-bellied, and with water running from their mouths, they have in most respects more the semblance of savage than of civilised man. Their women and children have much the same squalid appearance, though on their necks and wrists they wear ornaments made of the different kinds of wild seeds and of berries. Many of the men also wear ornaments in their ears, of yellow straw, plaited with some degree of ingenuity. They have no marriage ceremony; but occasionally, when two have been living together for some time, they will enter into an agreement, in the presence of friends, to remain united for life; and in a family where a succession of such unions has taken place, they will, once in two or three generations, perform a ceremony, and hold a festival in celebration of them. This is done by pouring pots of water over one another, the pairs seating themselves together for this purpose, the ablution commencing with the seniors. They then put on new cloths, and end the day in feasting and merriment. Kurumbar on the eastern slopes of the Neilgherry Hills and below Segur obtain a livelihood by timber-felling. The Kurumbar of the Wynad forests on the western side of the Neilgherry mountains have two sections, the Jani and the Mulli, and the Guruchen, Panniar, and Pulliar races live along with them. The Jani Kurumbar live entirely in the forest; they are the only axemen, and without them it would be difficult to work a forest, and the wood contractor and planter alike employ them. They are very docile, quick of imitation, and slavishly submissive to their mudeli or head. Those employed by the coffee planters are a little civilised, appreciating the comforts of life in a slight degree higher than their more savage brethren. They erect rude huts for the habitation of themselves and family, which are built on elevated ground, surrounded by jungles, and about six in number; they touch one another, and the whole present the form of a crescent. One larger than the rest, styled the cutcherry, is erected in the middle in the shape of a hall, for the sojourn of casual strangers. It is dedicated to their household deity, and the place cannot be contaminated by a shod foot. They may be said to be ephemeral residents in these habitations; the presence of a suspected stranger in their vicinity, sickness, or other trifling but natural cause, will make them migrate from one place to another, but generally within the same district.

Yenadi.—This term is said to be a dialectal variation from the Tamil word Anathan, meaning a poor man who has no guardian, guide, help, or protector. The race are also called Villi, Irular, and Maraver. Villi and Vader are synonymous, and mean hunters or uncivilised men who dwell in the woods. Irular or Iroolar means unenlightened or ignorant men. The Villi and Irular are less rude than the Yenadi.

Villi dwell in hamlets of five or six huts on the outskirts of most of the villages in the district of Chingleput, and are sometimes called Yenadi. They are herbalists. They have Mongol features;

the men have scant hair on the lip or chin, and no whiskers. They are polygamists. They eat all animal food, except the flesh of the cow. They dig up the wild chay root. The average height of the men was 5 feet 5 inches, and weight 83 lbs.

The *Enadi* or *Yanadi* race dwell in the Sriharicottah jungles, and in the hills and forests northwards to Nellore; they numbered 67,935 at the census of 1871. In 1867, in the Nellore district, they were estimated by Dr. Lloyd at 20,000. A similar race occupy the neighbouring forests on the hills at Naglawaram. In 1871 a number of the Enadi were living in Madras at the Vasara-pad serpent temple as its priests, and were finding employment as labourers. The Sriharicottah estate lapsed to the British Government in 1835. Till then, the Enadi were in a state of complete barbarism, did not know the use of money, were rarely seen, and lived on fruits, roots, and other jungle produce. In order to civilise them, Government employed them to gather jungle produce, and gave them in exchange rice and clothing. Also a register of marriages, births, and deaths was established, and at each birth of a boy 2½ annas were given, and of that of a girl 1½ anna. The residents inland are more robust than those of the Sriharicottah jungles.

The Yanadi live in huts over all the town of Nellore; but in 1871 those residing in a wild state in the hills separating Nellore and North Arcot were supposed to be few, sickness and civilisation having tended to remove them from that wretched condition. Those wild Enadi are small in stature, have poor attenuated frames, with no reverence for human life. They have been known, in removing a cloth from a sleeping man, to kill the unresisting owner first. Those in the hills live upon roots and grain obtained in exchange for forest produce, medicinal herbs, and honey. They steal sheep, and use violence if necessary, but they readily take employment with a civilised man, and rarely return to their old life.

Yerkal

Yerkullevar, . . . TEL.	Yerakellu, . . . TEL.
Eruku, Eruku-vadu, . . . "	Yerkal-vadu, . . . "
Erukulu-vadu, . . . "	Yerkel-wanlu, . . . "
Erukuvanlu (pl.), . . . "	Yerlan, Erlan, KODAGA.
Kurshi-wanlu, . . . "	Yerra-wanru, . . . "
Yerkal, Yerakedi, . . . "	

call themselves 'Kurri.' They are wanderers, living in grass, mat, or reed huts, make and sell mats and baskets, and tell fortunes. Where Canarese is spoken in the Peninsula, they occupy themselves ostensibly as basket-makers and in fortune-telling; but they are notoriously predatory, and steal girls, whom they devote to prostitution. They are found on the outskirts of most towns.

The Yerkala of the Nellore district are migratory mat and basket makers, using the midrib and leaflets of the date palm. They also make wooden combs, work as labourers, and a few who have settled engage in cultivation. They rear pigs, poultry, donkeys, and dogs, and eat the flesh of most animals. They are usually of a dark-brown colour, the men are spare and light made, but hardy, with low forehead, small eyes, short nose. They wear only a strip of cloth, and they tie their hair in a knot above their brow. They admit polygamy, but do not re-marry their widows. They seem to be identical with the Yevaru, Yerra-

wanru of Coorg, a class of predial slaves, amongst whom are several subdivisions,—Panay-Yewaru, Punjay-Yewaru, etc. The Yerrakula in the Kistna district are settled in villages.

The *Korawa*, in 1872, 60,255 in number, and Erukala, 54,163, in the Madras Presidency, are supposed to be the same race, known by the former name amongst the Tamil people, and as the Erukala in Telingana and amongst the Canarese. They are certainly of similar habits. The Korawa subdivisions are—(1) the Bajantri or Gaon Korawa or Sonai Kolawaru, (2) Teling Korawa or Kasbi Korawa, (3) Kolla Korawa, and (4) Soli Korawa. The clan called Kunchi or Kunsu Korawa, also known as the Kuachra Katta Kulwaru, seem the same as the Kasbi Korawa, and the Pattra Korawa or Patr Pallu have their name from the dancing girls having bells on their feet and ankles.

The Yerkal, Korawa, or Kunchi Kori are wanderers, of whose original country they themselves retain no knowledge. They are darker than the usual tinge of Hindus around them. In their own communities they style themselves Yerkal, and they give the same appellation to the language in which they hold communication with each other. With the exception of the cow, almost all animals are used by them as food.

They worship a goddess called Poler Anna. Polygamy is common; and if a man owe money to his neighbour, he pledges his wife or daughter to his creditor, who may either live with them or transfer them to another person. On the release of the debtor, he reclaims his wife and any children that may have been born in the interval. In N. Arcot, Chingleput, and Tanjore, the Korawa mortgage their unmarried daughters, who become the absolute property of the mortgagee until the debt is discharged. In Madras, the Korawa when in want of money sell their wives outright for about Rs. 50. In Nellore they all purchase their wives at from Rs. 30 to Rs. 70, making payment in asses or cattle. Their various clans do not intermarry. They bury their dead. In Travancore there are about 56,274 Korawa; and there is a race of this name in Cutch of similar habits.

The Bajantri Korawa are musicians (Baja, music); they are also called the Gaon or village Korawa. They are found in the Bijapur, Bellary, Hyderabad, and Canara district, residing in small tents (pal) or in grass huts outside the walls. The men are more robust than the settled population, but the women are shorter and darker than the Canarese. They abstain from cow's flesh, but eat deer, wild hog, tigers, jackals, and porcupine. They are thieves; they will not labour; the men are musicians, and with their women make grass screens (tatties); at harvest times they beg and pilfer from the reapers; the women tattoo the arms and foreheads of the Hindu women. They marry when the bride and bridegroom are about eighteen years of age; polygamy is allowed, and they live virtuously, never prostituting their children. They keep in their houses idols of the figure of Hanuman, and mark their foreheads with the marks of the Vaishnava sect.

The Teling Korawa are known as the Kasbi Korawa, i.e. prostitute Korawa, also Aghare Pal Wale, sitters at the door of their tents, as Tamar sat in an open place, and was seen by Judah (Genesis xxxviii. 13-21). They differ in appear-

ance from the Bajantri Korawa, but resemble in figure and countenance the Teling people. They are found throughout the Dekhan, are basket-makers and sell brooms, but their chief subsistence is from their young women, one of whom from their earliest infancy they devote to the gods. The devoted women are the Murli of the Mahratta, the Bassai of the Canarese, the Basava or Lingallu of the Teling races. The goddess to whose service their lives are dedicated is Madda Elama, also Hulgwa, near Bellary, and Chatwai, a divinity of their own creation by sprinkling red lead on the tarwar tree, the *Cassia auriculata*. The devoted women sometimes bear children, who are admitted into their caste. The colours seen amongst them vary from the fairness of the Brahmans to that of the darkest of the Sudra races. No one can read or write. They abstain only from cow's flesh and pork. The women dress with the choli or bodice and saree. They are rarely permitted to reside inside towns, or only then at some ruined spot remote from respectable people. They bury their dead, and place the deceased's usual food at the head of the grave, auguring most favourably if it be eaten by a crow and next if by a cow; if rejected by crow and cow, they deem the deceased to have lived a very depraved life, and fine the surviving relatives.

Religion.—The *Satani* are a Vaishnava sect; are frequently religious mendicants, priests of inferior temples, minstrels, sellers of flowers for offerings to the idols. They are followers of Chaitanya, a Vaishnava reformer of the 15th century, and of his disciple Sanatana. Chaitanya was a person of low caste, but became distinguished as an author and expounder of the doctrines of his master. The sect admit all classes and all castes into their sect, and many common women join them. In 1872 they numbered 194,777 in the Madras Presidency, and 714,000 in number in all India. They have views similar to the Baisnab (Vaishnava) reformers of Bengal.

The *Jaina* period in the Tamil country extended from the 8th or 9th to the 12th or 13th centuries A.D. Sandara Pandiya, who expelled the Jaina sect from Madura, was ruling when Marco Polo visited India at the close of the 13th century. Sandara Pandiya is also called Kun Pandiya or Kubja Pandiya. Nearly all the Jaina in the Madras Presidency are in N. and S. Arcot and in S. Canara.

Non-Hindus.—In British India, the people following the Brahmanical religion restrict the term Hindu to the Sudra races; the Brahman, the Rajput, and the Chettiar being distinguished by these appellations respectively. On the other hand, all whom they regard as low castes are styled by them Chandal or M'lecha, which latter term indeed they extend to Christians and Muhammadans. The non-Hindu races of British India are about seventy millions,—Buddhist and other races not recognising caste,—aboriginal tribes, semi-Hinduized aborigines, Christians, and Muhammadans. Also such races as the Kol, the Bhil, the Gond, the Khand, the Beder, the Dher, Mhar, Mhang, Chakili, Waddaru, Malla, Madaga, and the Pariah, the leather-worker, and fragments and small tribes scattered amongst the communities, occupying forests and mountain fastnesses, dwelling on the outskirts of towns, or migratory and nomadic.

These are largely shamanist and fetish worshippers. The shamau and fetish-worshippers, in general, bury their dead.

The deities to whom their worship is more specially directed are beings whose anger is to be feared. Pieces of wood or stone are made to represent these deities, a shapeless stone from a river bed, or a piece of the *Erythrina* tree, or of the margosa wood; but the institution of a prominent idol seems invariably to be accompanied by some sacrificial rite, sometimes a goat in kid, but more frequently the buffalo or bullock is the victim. A cart is made, on which, after sacrifice, the stone is placed, daubed with red lead, and taken to the site appointed for it. Poch Amma or Kokli Amma is the goddess who sends small-pox, and Mari or Marai Amma, the goddess from whom cholera comes, the epithet Mari or Marai being brought seemingly from the root relating to death, derivatives from which have branched into many of the old-world languages.

Throughout the south of India, each household of the Hindu and non-Hindu races, and each hamlet and town, have their particular personal and local deity. Eg-gath Amma is the guardian deity of the city of Madras, and once a year the idol representing her is taken around the town, halting for some days at particular spots. Wilson says that Mari Amma and Eg-gath Amma are goddesses adopted from the Virgin Mary and St. Agatha. Bal Amma, a shapeless mass of wood, is a goddess much dreaded, as are all who keep such an idol in their houses, and they are obliged to intermarry amongst themselves. Mari Amma seems the same as the Ai of the non-Aryan races in the Mahratta country.

The goddesses Mhang-kali, Ujla Mhang-kuli, Jul Amma, Yeli Amma, Poch Amma, and Madri Heri of the Central Dekhan, are all supposed to be related, to be, some elder, some younger, sisters of the same brood. To all of them are offered the sacrifice of blood of sheep, or goats, or horned cattle, and when the people are excited by an outbreak of a pestilence, the numbers of sheep and buffaloes sacrificed before an Ammun idol are numerous, so many as forty sheep in a night. The worshippers move in procession under loud cries, accompanied by the Murli women, who frequently become hysterical, who are then believed to be possessed by the god, and the onlookers exclaim, *Deo ka ch'haya aya, ang'h b'har lia*, The shade of the god has come, and filled the body. All of them adhere to the worship of spirits, and to such fetish and shaman cults as the above, in which indeed many of the uneducated Hindus, and more particularly the Mahratta Sudra people, share. But these forms of fetish-worship are most observed amongst the Pariah race, the leather-workers, the predatory races, the races that have been or continue to be predial, by domestic slaves, the forest races, and migratory homeless fragments of broken tribes.

The village god, the Gramma-deva, is everywhere worshipped by bloody sacrifices. The name in the centre of India is Bhim Sen, or Bhum Sen amongst the Gonds, Bhum supposed to be from Bhumi, earth. Bhum pen of the Gonds is usually a shapeless stone, covered with vermillion, and it is worshipped over all Gondwana and from E. to W. Benar.

The *Asuga* race of washmen of Mysore

worship a shapeless stone, which they call Bhumadevaru.

The Hari Mariah of the Mahratta races is a sacrifice of a live kid in front of their village god, and probably has its name from the Hindi word Har, a plough.

Amongst all the aboriginal and Aryan races of the Peninsula, serpent-worship and spirit-worship prevail. In the more southern parts, and among the less civilised races, new objects of worship are being constantly selected. In 1868, the raja of Wanparti died at Hyderabad, in the Dekhan. He had passed through a life of storm and turbulence, and his spirit was worshipped in Secunderabad on each occasion that cholera broke out. In the extreme south, the Pai or Pei or Paisachi are disembodied spirits, demons, and are worshipped by all the heathen Shanar race of Tinnevely. The Bant race of Canara believe that persons who die from violence become Paisachi. In the Telingana villages are many small temples dedicated to the Perintala, the spirits of women who have been deified, Perintala meaning a wife, a domestic woman. Amongst other female deities is Polimera, the goddess of boundaries, from Pola in Telugu, meaning land.

The village of Perriapollium, 25 miles north of Madras, on the bank of a small river, is famous for a temple dedicated to a goddess known by several names, Amma, Ellai Amma, Mari Amma, who is claimed by Hindus to be their Kali, or Durga, or Bhawani. An annual festival is held there, and about 100,000 persons assemble, and sheep, goats, and buffaloes are largely sacrificed, their heads being severed by one blow of a bill-hook. At the close of the festival, men, women, and children bathe in the river, and afterwards array themselves solely with the leaves of the Azadirachta Indica, not a particle of clothing nor of cotton is allowed to remain on the body, even the waist-string worn by men, and the thali or marriage neck-string worn by women, are laid aside. With the men, leafy twigs of the tree fastened to a straw rope are tied round the waist, and the leaves reach to the lower part of the thighs or knees. The women as their sole covering hold a cluster of the twigs in their hands, and cross their arms over their breasts. In this state they rush up to the temple door and salute the image within, then circumbulate the temple two or three times, bowing to the idol each time they pass the doorway, and then return to the river, where they bathe and resume their clothing. Occasionally devotees, in fulfilment of their vows, lie down near the temple, and roll themselves round and round it. Cattle, also, covered with the leaves, are led around the temple.

The Vira-Saiva sect of Lingaet and their Jangam priesthood are Hindus; are most numerous in Mysore and in the Canarese-speaking parts of the Madras, Hyderabad, and Bombay districts. They are not a moral sect, are bigoted and exclusive, and the men wear the emblem of Siva, in silver caskets, suspended from the neck or fastened around the arm. They are strict vegetarians, are engaged in all the avocations of civil life, and rarely enter the army.

The *Moplah*, written also *Mapillai*, from Ma, mother, Pillai, a son, are all Muhammadans, and are descendants of Arabs who visited or settled

in Malabar. Wilson supposes that the Malabar women who bore children to them, ignorant of the race of foreigners who were the fathers, styled the children 'sons of mothers;' but the probability is that the law of descensus ab utero, Marumakkatayam, prevailing there from prior ages, was followed by the mothers of the children born of casual or permanent intercourse. The Moplah are all large men, active and enterprising, and possess much landed property. They have been restless under British rule, and have repeatedly risen in insurrections, but these have been very local, and seem to have sprung from agrarian grievances, the result of being unacquainted with the Hindu proprietary rights in the lands. They are a devout, God-fearing race, inclined to puritanism, are occasionally fanatical and prone to religious excitement, but they have never been rulers in India, have no dynastic recollections or longings, and are well worthy of being encouraged by their British rulers. Under the influence of religious excitement; they are reckless of their own lives or those of others, and the presence of European troops in the district has always been considered necessary to secure peace. There were outbreaks about the years 1837, 1849? 1873. They are a hard-working, plodding, and frugal people, temperate and simple in their lives, and striving their best to live honestly and decently. They all speak the Maleali language, but they use a modified form of the Arabic alphabet to write in. The Moplah women are secluded. They number over 500,000 in the Madras provinces, principally in the Malabar and S. Canara districts. They prefix to their names the word Jonakan, a dialectal variation from Yavana, Grecian, to distinguish them from the Nestorian Christians, who are also called Mapillai, but have the word Nasrani, Nazarene, prefixed to the term.

Labbai, a race of Muhammadans in the Madras Presidency, where they number over 300,000, hard-working, intelligent, upright men, entering keenly and enterprisingly into all branches of trade, and extending their mercantile connection over all the Peninsula. They are merchants, tradesmen, pedlars, leather manufacturers, fishermen, boatmen, and sailors. They are numerous in Tanjore, Tinnevely, Madura, N. Arcot, and Madras town. They are liberal, large-minded people, yet frugal and thrifty in their personal expenditure. They use the Tamil language in their families, and have the Koran in that tongue. They take their name from the Arabic word *Labek*! meaning my lord, equivalent to the English expressions, 'I beg pardon,' 'What did you say?' Like the Moplah of the western coast, they are supposed to be descendants of Arab fathers by women of the southern parts of the Tamil country. They are mostly Sunni.

Christians have been in the south of India from soon after the time of Christ. During the past four centuries, Xavier, Robert de Nobilibus, Beschi, and Britto all laboured to convert the people of the south of India to the Romish faith; while Schwartz, Kohloff, Rhenius, and others have laboured for the Protestant Church.

Eurasians in the Madras Presidency at the census of 1871 were 26,374, of which 13,584 were in Madras or the neighbouring district of Chingleput, and 5409 in Malabar, where the Portuguese and Dutch had formerly settlements.

Their women in Madras are married when very young.

Cairns are observed in every part of the Peninsula of India from Nagpur to Tinnevely. There are immense numbers on the Annamallay Hills. There are six different kinds of cairns and cromlechs at the Neilgherry Hills. The Todas use the Azaram, a small stone circle, within which they burn their dead. Mr. Metz says the kistvaens are termed Moriari mane. These contain pottery with a rich red glaze, and many of the clay figures found in them have a high Tartar head-dress. They contain a very large urn or jar, filled with human bones, partially charred, with a number of beautiful little vessels of various shapes, made of glazed pottery, and with relics of iron weapons.

In the cairns of the Dekhan have been found skeletons on their faces, some with arms and utensils; other cairns have had ashes and charred bones.

BRITISH BURMA has an area of 87,220 square miles, and in 1881 a population of 3,736,771. It extends from lat. 10° to 22½° N., 950 miles, from the Pakchan river to near the sources of the Koladya river.

The province has five natural divisions. In Arakan, the narrow strip of lowland between the Yoma and the sea; the valleys of the Irawadi, Sitang, and Salwin, separated from each other by the Pegu Yoma and Pongloun ranges; and, in the south, in Tenasserim proper, a narrow lowland strip between the Siamese frontier and the Bay of Bengal. The coast line is upwards of 1000 miles.

The country is very thinly occupied, only 42·8 to the square mile. The inhabitants are composed of numerous tribes of the Mongoloid family, but owning no connection with each other, and they have entered the districts, some from the north, some from the east, and some from the south. Every year 80,000 to 100,000 immigrants enter Burma, more than one-half of whom are from Upper Burma, the others from Madras and Chittagong. Most of those who come from Buddhist countries settle in the province, but the bulk of the persons from India make a little money, and in three or four years retire. The Chinese who come to it are, more than others, inclined to settle, most of them being familiar with the Buddhist form of religion, which the races in Burma largely follow.

In the census of 1881, it was shown that 541,743 persons were born outside the provinces; of these 316,000 were natives of Upper Burma. The immigrants are mostly men, consequently the females are very few.

	Males.	Females.		Males.	Females.
1872,	1,436,618	1,311,630	1881,	1,991,006	1,745,768

The Burmese women readily intermarry with the immigrants.

There seem to have been two great branches of immigrants from the great bend of the Brahmaputra, one of these, Naga, Kuki, Shandoo, Lushai, Khyen, Mru, and Kum-wi, bending westwards. Another branch moved to the east, and are now known in the upper valley of the Irawadi as Kakhyen, who, on the watershed of the Irawadi and Salwin, merge into Karen, with the Karen-ni as an offshoot, and advanced into the delta of Pegu as the Karen cultivator; and of these the Tounghthu are probably a fragment. Subsequent to the

descent of these tribes, a great people seem to have entered from the head-waters of the Irawadi, occupying its splendid valley, and driving back the prior occupants into the mountains on either side. These last comers are now represented by the Burmans, from whom the Arakanese branched soon after the occupation of Burma proper.

The tribes that have been exposed on the seaboard of Arakan or in the basin of the Irawadi, to the influence of the Chinese, Shan, Mon, Bengali, and more distant commercial nations, have attained a comparatively high civilisation. The Singpho, although much behind the Burmans, are greatly in advance of the Kuki, and the Burmese seem at a very ancient period, when their condition was similar to that of the Kuki, and perhaps in many respects more barbarous, to have spread themselves from the Upper Irawadi to the south and west as far as the highlands of Tiperah on the one side, and Pegu on the other. Wherever the stock from which they have been derived was originally located, they probably first appeared on the Ultra-Indian ethnic stage as a barbarous Himalayan tribe, immediately to the eastward of the Mishmi, if indeed they were not identical with the Mishmi of that era. The Upper Irawadi was probably then occupied by the ruder and inland tribes of the Mon-Annam alliance.

Dr. Mason, writing in 1860, classed the races of Burma as follows:—

a. Burmese Tribes, viz.—

- | | |
|--------------------|--------------------------|
| 1. Burmese. | 7. Yau, Yo, Jo, or Quoi. |
| 2. Arakanese. | 8. Ze-baing or Ye-hain. |
| 3. Mugh. | 9. Pyu. |
| 4. Kanyan. | 10. Kado. |
| 5. Tounghoo tribe. | 11. Danu. |
| 6. Tavoy tribe. | |

3. Talaing, Peguan or Mon.

c. Shan Tribes, viz.—

- | | |
|---------------------------|----------------------|
| 1. Shan or Tai. | 3. Paloung or Palon. |
| 2. Lao, Lau, Lawa, or Wa. | 4. Phwon or Mwoon. |

d. Karen Tribes, viz.—

- | | |
|------------------------|-------------------------|
| i. Sgau Karen, viz.— | 2. Shoung. |
| 1. Sgau. | 3. Kay or Ka. |
| 2. Man-ne pghe. | 4. Turu or Ku-ha. |
| 3. Pa-ku. | 5. Mop-gha or Ple-man. |
| 4. We-wa. | 6. Ha-shwie? |
| | 7. Tounghthu. |
| ii. Bghai Karen, viz.— | 8. Khyen, Kyn, or Chin. |
| 1. Tunio Bghai. | iv. Shan Karen, viz.— |
| 2. Pant " | 1. Yen or Yein. |
| 3. Lay May. | 2. Yen-aeik. |
| 4. Manu-manau. | 3. Ying-bau. |
| 5. Red Karen. | 4. Pandung. |
| iii. Pwo Karen, viz.— | 5. Toungh-yo. |
| 1. Pwo. | 6. Black Karen. |

e. Miscellaneous Tribes, viz.—

- | | |
|----------------------|-------------|
| 1. Ka Khyen or Kaku. | 5. Sak. |
| 2. Ka mi or Ka mi. | 6. Mru. |
| 3. Kyan. | 7. Shandoo. |
| 4. Koon. | 8. Selung. |

In Burma, in 1881, the chief races were as under:—

Burmese, . . .	2,612,274	Chinese, . . .	12,962
Talaing, . . .	154,553	Bengali, . . .	99,646
Karen, . . .	581,294	Hindustani, . . .	72,000
Chin, . . .	55,015	Tamil, . . .	35,058
Tounghthu, . . .	35,554	Telugu, . . .	35,715
Kway-mi, . . .	13,773	All races from India, 246,289	
Mru, . . .	11,020	Europeans and Amer-	
Shan, . . .	59,723	icans, . . .	11,860

Their religions were as under:—

Buddhists, . . .	3,251,584	Jews,	204
Nat worshippers, .	143,581	Parsees,	83
Hindus,	88,177	Brahmans,	37
Christians,	84,219	Jains,	5
Muhammadans, . .	168,881		

The great *Mramma* family are known to the British as Burmese. They include the Arakanese, Burman, Tavoy, Choung - tha, Yau, Ya - bein races. The people and their speech are of common origin.

The *Arakanese* differ but little from the Burmese in feature or form, and though the Arakanese spoken language is so dissimilar from that of the Burmese, as to be almost unintelligible, when written it is the same in almost all respects. They preserve the letter *r*, which the Burmese pronounce *y* in sound. The Arakanese also retain with its natural sound the inherent vowel *a*, which on the east of the Arakan Yoma range is pronounced in several different ways.

In Tavoy are descendants of an Arakanese colony, planted there before the Burmese had conquered the intervening Talaing or Mon. The principal inhabitants of Amherst province are Talaing, Karen, and Tounghthu, with small numbers of Arakanese, Shan, Burmese, Hindus, Chinese, Muhammadans, and Malaya.

The *Yau* live on a western tributary of the Irawadi, about the latitude of Pagan. They do not differ much from the Burmese either in race or language. They are the pedlars of Upper Burma.

The *Ya-bein* are almost indistinguishable from the Burmese. Their language is a dialect of the Burmese. They rear silk-worms, which is never done by the pure Burman.

Choung-tha, or children of the stream, are a part of the Arakanese nation who have remained in the hills. They are gradually descending into the plains. They speak Arakanese, and are Buddhists.

In the Tibeto-Burman family, and belonging by origin to the same great *Mramma* group as the Burmese, are classed the hill tribes of Arakan.—the Sak, Chaw, Kway-mi, Koon, Mru, and Shan-doo tribes,—who live near the Koladyn and its tributaries. Their languages are marked by differences sufficient to entitle them to be separately named.

The *Burmans* proper occupy the valley of the Irawadi, mixed with Karen, from lat. 18° N. to the delta. They are Buddhists. Their language, the Burmese, is spoken in Arakan, in the valleys of the Irawadi and Sitang, and in Tenasserim to the south of Tavoy. There are numerous Shan States far to the north-east, but they generally owe fealty to the Burmese monarch. The tribes and natives under the sway of the respective rulers are numerous.

The Burmans are lively, inquisitive, active, irascible, and impatient. The men have long bodies, with short, stout thighs. They are of a reddish-yellow colour, are not fond of continuous daily labour. Both men and women wear a jacket, and a wrapper for the lower part of the body.

The Burman woman's lower garment is a narrow cloth of various colours, of a pleasing contrast, which descends generally from the waist or from below the arm to the feet. It is made to overlap, and is tucked in in front, at the waist, but it is so narrow that most of the inner thigh is shown at

each step. The young people are little restricted in their intercourse, and the marriage ceremony, and that of divorce, are simple; the women are naturally affectionate, very intelligent, engage largely in market and shopping business, and even undertake extensive mercantile transactions.

Every male Burman is tattooed in his boyhood from the waist to the knees; in fact, he has a pair of breeches tattooed on him. The pattern is a fanciful medley of animals and arabesques, but it is scarcely distinguishable, save as a general tint, excepting on a rather fair skin. Erskine, in his *Course in the Pacific*, mentions that the natives of the Samoa or Navigators' Islands have exactly the same fashion.

The Burmese are spirit worshippers. They propitiate the Naidas, they reverence the snake. Almost every Mon village has a Nat sin or Nat shed.

They believe in astrology, alchemy, and witchcraft, the evil eye, philtres. The Hman Tsaya is the witch-finder. Diseases are supposed to be the work of evil-disposed Nats. The Kyat or Jat are elfs or goblins, who live in the earth-mounds found in the forest.

Pungyi or *Phoungye*, meaning Great Exemplar or Great Glory, is the name by which the members of the monastic rule of Buddhism are commonly known in Burma.

Mugh is a term which the Muhammadans and British have given to the Arakanese, but that people restrict it to the descendants of Arakanese by Bengali mothers. The Mugh form six-tenths of the native population of Arakan, one-tenth being Burmese and the remainder Hindu. In Arakan, and in the basin of the Irawadi, are several tribes of the same stock with the Burman, and their languages are in their present form so much akin to it that they may be almost considered as forming, with Burman, dialects of one tongue.

Karen is a term by which the Burmese designate most of the mountaineers of Pegu and Southern Burma. The Shan call them Yang, which is pronounced by the Burmese Yen, and there are tribes known as Yein, Yen-seik, Yen-bau. Some of the Karen tribes wear white clothing, some black, and some red, and these colours have been used to designate them. But as some of their tribes wear a frock or tunic, while others have short trousers as a costume, the forms of their clothing have been employed as designations.

Red Karen call themselves Ka-ya; some of the Bghni clans, Ka-yay. They have traditions pointing to the north as the region whence they migrated, and of having crossed a river of sand (shamo), a desert where the sands rolled before the winds, also of having once been in the possession of books of religion, which they had lost. This tradition may refer to Gobi desert, which is intersected from E. to W. by a depressed valley, the Shamo or Sea of Sand, which is also mixed with salt. West from it lies the Hau Hai or Dry Sea, a barren plain of shifting sand blown into high ridges. But they are an impressionable race, and it will be difficult to localize the place to which they allude.

The Karen preceded the Burmans in the delta of the Irawadi, and are now the joint occupants with the Mon. They are also found in the lower plains of the Salwin, the deltas of the Sitang

and Irawadi, the middle basin of the Sitang as far as Tonga, and in Tenasserim. In Martaban there is also a remnant of an allied tribe, the Tounghthu. Both the Karen and the Tounghthu belong to the Yuma branch of the Tibeto-Burman family.

The long and narrow hill tract between the valley of the Irawadi and the Salwin as far north as 23° is occupied by cognate tribes called Karen-ni (Red Karen), who are said to speak a very ancient dialect of the Yuma family. This branch has a parallel range on the western side of the Irawadi, and in their traditions they assert that they preceded the Burmans as the dominant people of the basin, and they seem from very ancient times to have occupied the whole of the valley southward from the valley of the Banak on the west to the borders of Yunnan.

No trace of the Mon is left along the Yuma range,—tribes of the Karen family being the exclusive holders of its inner valleys. Some of the very imperfectly described tribes on the eastern side of the Irawadi, to the north of the Karen-ni, viz. the Ze-baing, Ka-Khyen, etc., may belong to the older immigration. But the Mon is the only remnant within the ancient Karen province, and its earlier preservation is doubtless owing to the same causes, its arts, civilisation, and wealth, which have enabled it to hold its own against the Tibeto-Burman horde of the Irawadi.

The Karen in British Burma are over half a million (581,294). Their language differs widely from those of the hill tribes of Arakan, and ethnologists class them by themselves, separate from the members of the Mramma family. They are supposed to have come from the N.W. of China, moving towards Yunnan, and thence along the hills on either side of the Sitang and Salwin rivers into their present positions, about the 6th century of the Christian era.

There are three great groups,—the Sgau or Burman Karen, the Pwo or Talaing Karen, and the Bghai or Bweh, to one or other of which linguistic groups all the clans are referred.

The Karen languages are monosyllabic and tonic, and show unmistakable evidence of Chinese influence in their vocabulary. The Bweh Karen are in the Salwin and Martaban district. They include the Karen-ni or Red Karen.

The Karens paint the two posts of their doorways, the one red and the other white. Karens walk round the dead to make a smooth path, like the Bhotani in procession round the shrines of Buddha, and like Jews, who walk seven times round the coffins of their friends. The Jewish priests, in offering oblations, Psalm xxvi. 6, walked round the altar seven times. The Assam hill tribes, like Karens, consider the touch of the dead pollution, as in Numbers xix. 13: 'Whosoever toucheth the dead body of a man, and purifieth not himself, defileth the tabernacle of the Lord: because the water of separation was not sprinkled upon him, he shall be unclean.' Karens are smaller than the Burmans. The White Miaou-tee, who occupy the hill country of Central China, present many points of resemblance to the Karens. They are brave, independent, and at certain intervals sacrifice an ox without blemish to the great Father. It is amongst the Miaou-tee that the Old Testament is said to have existed from time

immemorial, which they say came to them from heaven 2000 years ago.

The first convert to Christianity was Ko Thal Byu, who was baptized at Tavoy in 1828; but before his death in 1841, there were 1300 native disciples. The missionaries amongst them have been Mr. Boardman, Miss Macombe, and Messrs. Mason, Wade, Bennet, and Abbot. Several of their dialects have been reduced to writing, some in Roman, some in Burman character, and the Scriptures translated.

Sgau tribes speak the Sgau dialect. Sgau is their own designation for themselves, but they likewise claim to be Pgha-ka-nyo, or men. As the seaboard is approached, the Sgau and the Pwo are found mingled together from Bassein to Mergui. They are, however, found from Mergui, in lat. 12° N., to Prome and Tounghoo, in lat. 19° N.; a few have passed westerly into Arakan, and on the east they have wandered to the east of Zimmy over the watershed that separates the Meinam from the Salwin. They are the most numerous of all the Karen tribes. They wear a white tunic, with a few horizontal bands of a red colour near the bottom, and from this they are called White Karen. Where the population is sparse, they cultivate the most favourable spots, first, before hewing down the trees, abjuring the departure of all evil, and then dibbling in the rice seed, which they do not sow broadcast like the Burmese; planting also cotton, capsicum, Indian corn, vegetables of all kinds, and Job's tears between the rows. They also fish largely, for they eat all creatures, lizards, snakes, deer, wild hog, elephant, rhinoceros, wild ox, buffalo; they gather the wild cardamom, or wash for tin. They have no mechanical art, but some of the women weave and embroider. Their betrothals are in infancy, and the married couple early associate, but there are frequent separations. All the Sgau and the Pwo burn their dead, but a bone is taken from the ashes, and in the dry season is buried with a festival, with music and dancing. The bone is placed in a booth, and around it the articles belonging to the deceased are hung, with a torch at the head and another at the foot to represent the morning and evening stars. They make offerings to evil spirits, the Na, and to a good spirit, whom they style grandmother.

Bghai or Bweh.—From the mouth of the Thouk-ye-Khat creek to near the British boundary and the Shan State of Mo-bya, the whole country from the Sitang to the Salwin is peopled nearly exclusively by tribes to whom the Sgau and the Pa-ku give the name of Bghai. The Bghai or Bweh are met with immediately north of the Sgau and Pwo, on the left bank of the Sitang, and on the watershed between it and the Salwin.

Lushai.—The high mountain range called Moduting, Mranidong, and Yomdong, forms a natural boundary between Chittagong and Arakan. The Koladyn flows about 16 miles distant on the east, and the country there is mostly uninhabited. To the west are the Lushai.

The *Shandoo* are a recently intruded tribe. They are the most warlike tribe, and exist in large numbers outside the boundary of British Burma, and are said to be pressing the Kway-mi and Mru southwards. They are probably the same race as the Kuki, who, according to Colonel Dalton, stretch from the valley of the Koladyn to the

border of Manipur and Cachar. Their language belongs to the Tibeto-Burman family.

The *Kway-mi* or *Ka-mi* (dog-tail) differ but little from the *Mru*. Both these races are moving southwards. Sir Arthur Phayre believed them to form a branch of the *Myam-ma* race, from which the Burmese and Arakanese spring, and he considers the hill tribes to be prior occupants. They number about 19,000, two-thirds of whom are in the hills of N. Arakan, the rest having settled on the Akyab plains. They have black, straight hair, high cheek-bones, oblique eyes, and scanty beards. They appear, like the *Rakhaing-tha*, in a more rude state of existence, and the traditions of the latter people refer to the *Ka-mi* as prior occupants.

The *Toungthu* in personal appearance and dress somewhat resemble the Shan. They are short of stature, and thickly built. Their language is tonic, and closely connected in vocabulary and syntax with the *Pwo Karen*. They are a clannish, taciturn people. Their name signifies hillman, but they call themselves *Pao*, and are divided into many local clans. In British Burma they number about 30,000 in the Amherst district, on the banks of the Salwin, and along the Thathone range of hills, and about 5000 east of Kyi Kato.

Northern Arakan hill tracts comprise a district about 60 miles long and 40 broad. There are six distinct clear ranges, and two important rivers with their affluents pierce the mountains. Till recent years the whole of this region was the home of many wild and lawless clans, who lived amidst constant rapine and disorder, and the British policy has been to mark a boundary for the more civilised possessions. In 1875-76 there were four tribes within the British territory, numbering 12,442 souls. *Rakhaing* or *Khyoung-tha*, sons of the river, 1219; *Khami* or *Rhwe-mnyi*, 7172; *Anu* or *Khoung-tso-Khyeng*, 2162; *Khyaw* or *Kuki Mro*, 2126. The *Mru* outside the boundary are the worst of the marauders.

The *Khyen* are the largest of the numerous hill tribes of Arakan. They occupy the Yoma range of mountains between Pegu and Arakan, are numerous in the hill tracts of Northern Arakan, and on the eastern side of the Irawadi, in the uplands of Prome and Myedai, and on the watershed between the Irawadi and Sitang. There are also some 5000 in Sandoway. Captain Hannay says they are identical with the *Naga*. Colonel Yule thinks they are nearly allied to the *Kuki*. Dr. Mason classes them with the *Pwo Karen*. They are a retiring, timid race; are migratory, but are settling down under British rule, following the practice of jhoom or *toung-ya* cultivation. In British Burma they number over 50,000, partly in Arakan and in Pegu, chiefly in *Thayat-Myo* and *Prome*, with settlements on the north of Pegu as far as *Toungthoo*. The *Chin* or *Khyen* are widely extended in British Burma, being on both sides of the Arakan Yoma, also in the *Thayat-Myo* and *Prome* districts to the east of the Irawadi river, and are in large numbers in Upper Burma. They point to the *Chindwin* river as their ancient home. They tattoo the faces of their young girls so as not to leave even an eyelid free from hideous blue-black deformity. Their language has affinities with the *Pwo Karen*.

The *Chaw* are a small tribe of 587 souls in

North Arakan. They are connected with the *Kuki*.

The *Sak* or *Thek* are in the Akyab district.

Shan of the Burmese are the *Po-yi* of the Chinese, and the *Tai* of the Siamese. *Po-yi* means White Barbarian. The Shans are behind the Chinese in the arts, but in Burma every article of husbandry of iron, brass, or silver is from the Shan States N. and E. of the capital, also the best of the lacquered ware, the last principally from Monai to the E. of Lower Pagan. The Shan States also manufacture silk, and the Shans of the N.E. and the Cathay Shans or *Munipuri* know the art of dyeing both cotton and silk. The silks are exceedingly rich, and of varied check patterns.

The Shans in British Burma in 1881 were 59,723 immigrants and their descendants, chiefly from the Shan States. Outside the boundary they are very numerous from the N.E. of the kingdom of Ava to Bangkok. They are of the same origin as the *Ahom* and *Khamti* of Assam. Their language is monosyllabic, and has, like the Chinese and Karen languages, more numerous tones than the Burmese. They are hard-working and careful cultivators.

Mon or *Talaing*.—The tracts about the mouths of the Irawadi, Sitang, and Salwin were anciently called *Savarna Bhumi* or *Ramanya*, and were inhabited by the *Mon*. The language of the *Talaing* is monosyllabic and tonic, with a sprinkling of polysyllabic words, and had a common origin with those of Cambodia and Annam; and Captain Forbes has suggested that the Assamese, *Mon*, and *Cambodians* moved down the Indo-Chinese Peninsula about the same time, and occupied contiguous tracts of country until the Siamese intruded themselves between the members of the *Mon Annam* family. It has been suggested that the *Mon* language is connected with that of the *Munda* or *Kolarian* tribe in *Chutia Nagpur*, and a few words in both languages are more or less alike.

There are in British Burma 154,553 pure *Talaing*, and 177,939 persons of mixed Burmese and *Talaing* parentage.

The Burmese call them *Talaing*. The Siamese appellation is *Ming-mon*. The ancient capital of the *Talaing* was called *Thadung*, *Thatung*, or *Satung*. Its ruins are still to be seen between the mouths of the Sitang and Salwin rivers, and the colonists seem to have been of Hindu origin, possibly arriving several centuries before the Christian era. They seem to have extended their empire to Pegu and Arakan in the early centuries of the Christian era, and to have held sway for sixteen centuries. Part of this population dwell on the delta of the Irawadi, *Mon* being the name used by themselves for the native populations of Pegu, *Moulmein*, *Amherst*, and *Martaban*; but their neighbours call them *Talaing*, and the same names, *Mon* or *Talaing*, are given to the vernacular language of Pegu. The alphabet, like that of the *T'hai* and Burmese, is of Indian origin, being essentially that of the *Pali* form of speech; and, like all alphabets of this kind, its language embodies a Buddhist literature. The *Mon* language is quite unintelligible to a Burmese or Siamese.

The *Talaing* language has the intonations characteristic of the Chinese family, but to a

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much less extent than the Chinese itself, the Tai, or the Karen. The roots are principally monosyllabic, but this language is remarkable for its numerous compound consonants. Like all other Indo-Chinese languages, grammatical distinctions are made by particles prefixed or suffixed. In its vocables it is the most isolated language in Further India, but it has a radical affinity with the language of the Ho or Kol. The Talaing people call themselves Mon, which has this bearing on their origin, that a Ho or Kol tribe are called Munda and Mon. Mr. O'Riley thinks that the Mon are only distinguishable from the Burmans by their less Mongolian and more Rakhoing aspect. They appear to have been considerably modified by the Indian element, which has always been very powerful at the head of the Bay of Bengal.

The *Daingnet* or *Dinet*, 1995 in Akyab, are in features somewhat like the Gurkha of Nepal. They do not tattoo their bodies, dress in white, and do not intermarry with other races. They dwell among the hills of the Yet-thay-doung township, near the Chittagong frontier. A few speak the Nepal tongue, some talk Bengali, and some Arakanese.

Salone, 894 in number, are a tribe of sea gypsies, living in the dry weather in their boats, wandering about the islands of the Malay Archipelago, and during the monsoon taking shelter in huts built on the lee side of the islands. Their clans keep to their respective fishing grounds. They have peculiar wicker boats, and were formerly exposed to the attacks of Malay pirates. They are in personal appearance between the Malay and the Burmese. Their language has affinities with the tongue of the former, and belongs to the Malay Polynesian group of agglutinating languages. They visit Mergui to dispose of the *beche-de-mer*.

2,245,125 persons speak the Burmese language proper. Amongst these are included many of mixed race, such as the Burmese-Talaing.

There are 362,988 Arakanese, chiefly in the Akyab and Kyouk-pyu districts of Arakan, with large numbers in Sandoway. The whole number speaking Burmese therefore is 2,612,274.

All the languages that have been included under the head of Burmese belong to what is sometimes called the Tibeto-Burman family, are monosyllabic, and are spoken by races possessing the Mongolian type of countenance.

The Burmese women readily intermarry with the immigrants. The principal mixed races are as under:—

Burman-Chin, . . . 1,554	Chin-Karen, . . . 988
" Chinese, . . . 4,886	Shan-Chinese, . . . 1,213
" Karen, . . . 713	" Karen, . . . 1,323
" Shan, . . . 24,309	Toung-hoo-Karen, . . . 2,486
" Talaing, 177,939	Hindustani-Burman, . . . 8,968
" Toung-hoo, 1,076	English-Burman, . . . 703
Talaing-Shan, . . . 9,517	

Total indigenous and allied mixed races, . . . 230,484

Total Indo-Burman races, . . . 10,620

Total European-Burman races, . . . 702

Total Christians returned as Europeans, . . . 6,808

Castes and Tribes.—In British India proper the following are the castes returned in the census of 1881 as exceeding 100,000 in any one province:—

Agamudian, . . . 302,338	Ahr, . . . 4,639,167
Agria, Mith-Agria, 170,753	Ahom, . . . 179,814
Ahar, . . . 272,863	Ambalakaran, . . . 155,537

Ambattan, . . . 342,816	Kamma, . . . 795,732
Araikulam, . . . 369,636	Kandara, Bengal, 120,906
Arora, . . . 560,896	Kandu, . . . 608,919
Babhan, . . . 1,031,601	Kanet, . . . 344,814
Bagdi, . . . 761,915	Kapali, . . . 130,240
Balai, . . . 301,995	Kapu, . . . 107,341
Baliya, . . . 780,181	Karan, . . . 106,332
Banjari, . . . 244,498	Kawa, . . . 1,102,255
Banya, . . . 3,275,914	Kawar, . . . 115,078
Barhai, . . . 566,192	Kayasth, . . . 2,159,813
Barhi, . . . 484,424	Kewat, . . . 521,053
Barui, . . . 218,812	Khandait, . . . 617,017
Bauri, . . . 491,407	Kharwar, . . . 195,242
Beder, . . . 171,269	Khatask, . . . 168,829
Berad, . . . 263,896	Khatri, . . . 393,199
Bhandari, . . . 158,388	Khond, . . . 135,960
Bhangi, Mihtar, 441,483	Koch, . . . 1,878,804
Bhar, . . . 349,113	Kodula, . . . 244,090
Bhat, . . . 167,371	Koeri, . . . 1,207,951
Bhil, . . . 141,972?	Kol, . . . 299,961
Bhil (Dubla), . . . 129,241	Koli, Konkani, . . . 125,949
Bhoi, Besta, . . . 839,587	Mahratta, . . . 881,014
Bhuinhar, . . . 188,151	Baroda, . . . 676,661
Bhuinya, . . . 463,656	Talabda, . . . 661,865
Bhumij, . . . 251,606	Kolita, . . . 253,860
Bhurji, . . . 304,844	Komati, . . . 591,639
Bind, . . . 136,812	Kori, . . . 884,871
Boisnab, . . . 568,032	Koahiti, . . . 315,424
Brahman, . . . 13,730,045	Kumar, . . . 114,378
Chamar Khalpa, 10,474,686	Kumhar, . . . 2,053,080
Chandal, Changa, 1,749,608	Kummalen, . . . 784,998
Channan, . . . 128,600	Kunbi, . . . 7,146,555
Chasa, . . . 534,061	Lewa, . . . 508,038
Christians, . . . 1,862,634	Kadawa, . . . 334,881
Chuhra, . . . 629,412	Kura Varu, . . . 225,282
Das, . . . 102,426	Kurmi, . . . 4,065,075
Devangulu, . . . 136,901	Kurubar, . . . 225,282
Dhangar, . . . 1,147,154	Kusavan, . . . 263,975
Dhanuk, . . . 661,269	Lingwet, . . . 457,168
Dher, . . . 110,040	Jangam, . . . 320,856
Hyderabad, . . . 2,660,087	Lodhi, . . . 1,040,724
Dhimar, . . . 193,585	Lodhi, . . . 264,667
Dhobi, . . . 1,331,190	Lohanna, . . . 348,514
Dom, . . . 721,655	Lohar, . . . 1,505,858
Dosadh, . . . 1,138,651	Lonja, . . . 378,619
Dubla, . . . 129,241	Madigaru, . . . 174,824
Elaven, . . . 387,176	Maduk, . . . 308,821
Gadaria, . . . 920,220	Mahajan, . . . 634,440
Gareri, . . . 112,400	Malayala Sudra, 664,260
Gauda, . . . 233,991	Mal, . . . 142,114
Gaudaru, Sivaohar, 259,110	Mali, . . . 1,209,019
Ghatwal, . . . 113,173	Mallah, . . . 1,084,931
Ghiriat, . . . 158,649	Mang, . . . 556,771
Goalla, . . . 4,005,969	Marar, . . . 184,519
Golla, Kuruba, . . . 180,635	Maravan, . . . 256,304
Golla, Gaoi, . . . 242,767	Mehru, . . . 231,624
Gond, . . . 646,277	Mhar, Dher, . . . 2,742,216
Gonda, . . . 144,063	Minna, . . . 432,006
Gosain, . . . 147,998	Munurwar, . . . 187,458
Gour, . . . 214,818	Mussahar, . . . 549,524
Gowari, . . . 110,579	Mutrai, . . . 104,671
Gujar, . . . 1,243,113	Mutsaita, . . . 133,141
Hajam, Barber, . . . 237,919	Nahambadi, . . . 106,682
Hari, . . . 297,643	Nai, . . . 2,283,641
Holiar, . . . 447,421	Nair, . . . 336,227
Idayan, . . . 1,071,882	Nat, Jugi, . . . 121,901
Jain, . . . 189,493	Nath worahippers, 143,581
Jaliya, . . . 381,540	Nunnia, . . . 282,090
Jandra, . . . 107,169	Oddan, . . . 363,289
Jangam, . . . 320,856	Ooria, . . . 101,199
Jat, . . . 2,630,994	Padiyaoi, . . . 376,847
Jhinwar, . . . 269,111	Pan, . . . 241,487
Jugi, . . . 340,842	Panchamsali, . . . 291,246
Kachari, . . . 281,611	Parat, . . . 162,002
Kach'hi, . . . 2,258,769	Parayen, . . . 3,290,038
Kahar, . . . 1,840,356	Pasi, . . . 1,199,505
Kaibhartha, . . . 2,137,540	Pillai, . . . 1,294,982
Kaikalar, . . . 323,788	Pod, . . . 325,755
Kalal, . . . 249,787	Powar, . . . 106,081
Kalar, . . . 153,070	Pulaven, . . . 198,539
Kalingalu, . . . 100,564	Rajbanai, . . . 106,376
Kalita, . . . 253,860	Rajwar, . . . 131,364
Kallam, . . . 397,857	Reddi, . . . 654,700
Kalu, . . . 170,782	Sadgop, . . . 557,947
Kalwar, . . . 535,819	Saini, . . . 137,380

Sakkili, . . .	1,126,837	Tarkhan, . . .	219,591
Salu, . . .	206,794	Tatwa, . . .	245,904
Salawara, . . .	194,134	Teli, . . .	2,953,939
Santal, . . .	210,661	Teli and Ghanochi, . . .	200,183
Saora, . . .	103,480	Telंगा, . . .	327,338
Savaralu, . . .	131,469	Telugalu, . . .	613,090
Sembadaven, . . .	100,019	Tiar, . . .	349,117
Setti, . . .	235,286	Uapparavan, . . .	104,959
Shanan, . . .	1,478,690	Uriya, . . .	101,199
Sonar, . . .	879,709	Vanau, . . .	528,458
Sudra, . . .	339,355	Vanian, . . .	339,136
Sunri, . . .	589,021	Vanian, . . .	1,075,264
Sutar, . . .	363,198	Velama, . . .	348,063
Taga, . . .	101,615	Vellalar, . . .	1,770,669
Tamoli, . . .	320,266	Wakkaliga, . . .	695,215
Tanti, . . .	679,875	Yadavalu, . . .	105,426

Religions.

Hindu, . . .	187,937,450	Nat worship, . . .	143,581
Muhammadans, . . .	50,121,585	Parsee, . . .	85,397
Aborigines, . . .	6,426,511	Jew, . . .	12,009
Buddhist, . . .	3,418,884	Bramho, . . .	1,147
Christian, . . .	1,862,634	Kunbipatia, . . .	913
Sikh, . . .	1,853,426	Others and unspci-	
Jain, . . .	1,221,896	fied, . . .	59,985
Satnami, . . .	398,409		
Kabirpanthi, . . .	347,994	All religions, . . .	253,891,821

—*Dr. Caldwell's Comparative Grammar and Shanars; Mr. (Sir George) Campbell's Ethnology of India; Dr. A. Campbell in Journ. Ethnological Society; Sir Walter Elliot in J. Eth. Soc.; Sir Henry Elliot's India; Captain Forbes, N.E. Frontier; Fraser's Himalaya Mts.; Gerard's Kunawar; Dr. W. W. Hunter's Non-Aryan Languages and Imperial Gazetteer; India Administration and Census Reports; Journals Asiatic and Ethnological Societies; Marshall's Todas; Mason's Burma; Samuells, in Beng. As. Soc. Jo., 1856; Dr. John Shortt on Leaf Festival, on the Yenadi, on Neilgherry Tribes; Turner's Embassy; Dr. F. Watson's People of India; Dr. H. H. Wilson's Hindoo Castes; Dr. Thomson's Travels in N.W. Himalaya; Mr. Trelawney Saunders in Geog. Soc. Journ.*

On the **NORTHERN AND NORTH-EASTERN FRONTIER OF INDIA** the principal races may be enumerated as under:—

Chinese Frontier and Tibet.—Tibetan, Bod, Gyanii, Gyarung, Takpa, Manyak, Thocho, Sokpa, Horpa.
Nepal, W. to E.—Serpa, Sunwar, Gurung, Murni, Mugar, Thakya, Pakhya, Newar, Limbu.
E. Nepal.—Kiranti, Rodong, Rungchenbung, Ching-tangya, Nachborong, Waling, Yakha, Ohouraya, Kulungya, Thulungya, Bahingya, Lohoroug, Lunbichhun, Balali, Sangpang, Dmai or Dumi, Khaling, Dungmali.

Nepal Broken Tribes.—Darhi, Denwar or Dhenwar, Pahri, Chepang, Bhramu, Vayu or Hayu, Kuswar, Kusunda, Tharu, Bhramah, Bhotia, Brahman, Ektharlah, Gallia, Kami, Khas, Margi, Mungar, Murung, Nimbu, Parbattiah, Sarki, Yakha.

Sikkim.—Lepcha.

Bhutan.—Lhopa.

Bengal, N. E.—Bodo, Dhimal, Koch, Garo, Kachari.

Bengal, E., in Assam.

The valleys of the Himalaya are occupied by many tribes, who carry on traffic and intercourse over the mountain passes, amongst the highest of which (above the sea) are the Baralacha, 16,500 feet; Niti, 16,800 feet; Balch, 17,700 feet; Umasi, 18,000 feet; Lankpya, 18,000 feet; Kuibrang, 18,300 feet; Lakhur, 18,400 feet; Mana, 18,760 feet.

Mr. Hodgson, Dr. Campbell, and Mr. Aitcheson have all noticed the maze of languages spoken in the Himalaya; and the ethnic phenomena in the Himalaya warrant the conclusion that they were

peopled by successive swarms from the great Turanian hive; that its tribes are yet traceably alike to the Altaic branch of the north and to the Dravidian of the south, and that the Khas, the Kanet, the Dogra, and several other tribes of the Western Himalaya are of mixed breed, descended from Tartar mothers and Aryan fathers.

The *Nimcha* are a half-breed race on the southern slope of the Indian Caucasus, between the Afghans and the higher peaks. They speak a language related to the Indian tongues, with some curious affinities to Latin.

The northern region of the Himalaya is occupied exclusively by the Cis-Himalayan Bhotia (called Palu Sen, Rongbo, Serpa, Kath Bhotia, etc.), who extend along the whole line of the ghats, and who, with the name, have retained unchanged the lingual and physical characteristics, and even the manners, customs, and dress of their transnivean brethren.

To the central region of the Himalaya are confined, each in their own province, from west to east, the Dunghar, west from Nepal; the Dardu, Gakkar, Bamba, Kakka, Dogra, Kanet, Garhwali, Kohli, the Kus, Khas, or Khasia in Nepal; the Magar, the Gurung, the Kusunda, Chepang, Sunwar, Newar, Murni or Tamar, Khombo or Kiranti, the Yakha, the Limbu or Yakthumba, the Lepcha or Deunjong-marro in Sikkim; the Lhopa in Bhutan.

In the lower region of the Himalaya, and in similarly malarious sites of the middle region, dwell the Bahoa, west of Kamaon to the Indus; the Chibbi, the Janjoh, the Awan, the Khatir, the Boksa in Kamaon; the Bhotia in Nepal; the Kuswar, the Dahi or Dari, the Bhramu, the Kumha, the Dhenwar, the Tharu, the Hayu, the Pallas, the Kichak, the Dhimal of Sikkim and east of it; the Bodo and the Koch'h. Of these, the Khas, Magar, Gurung, Newar, Murni, Lepcha, and Bodpa, etc., are dominant unbroken tribes.

The broken tribes are the Awalia, Chepang, Kusunda, and Hayu; and there are located amongst them from time immemorial tribes of helot craftsmen, blacksmiths, carpenters, curriers, potters, etc., who are regarded as unclean.

The unbroken tribes are the more recent immigrants from the north; their languages are of the simpler Turanian type, whereas those of the broken tribes are of the complex or pronominal type.

West of Nepal comes the Palpa, then the Thak-syn, Sunwar, and Serpa; the dialects of Kamaon and Garhwal, which carry us on to the Milchan of Kanawar; the Hundisi and Tibarskad north of it.

In Nepal, the Parbattiah or Paharia, a dialect of Hindi, is spoken all over the state, and forms the court language.

Between Loh and Dras, three distinct dialects of the same language are in use. The people and their language are called Bhot by the Kashmiri. It is entirely different from Kashmiri and its cognate dialects of Dardistan and Kafiristan, or of Badakhshan and Wakkan, and bears no resemblance to the Turki and Kalmaghi spoken in Kashgar.

In the lower country, the people near the debouchure of the Kashgar river speak a mixed tongue, called Lughmani.

The men of all castes in the hills are short and of poor physique; they look worn, and get deep lined on the face at a comparatively early age.

The young women are often extremely pretty, those living in the higher and colder villages having, at 15 or 16, a complexion as fair as many Spaniards or Italians, and with very regular features. But they grow darker as they advance in years, and become very plain.

Most of the traders of the snow valleys have some members of their families residing at Daba or Gyani on the Nuna-khar lake.

The natives of Sukeyt, Mundi, and Kulu, in the Kohistan of the Jalandhar, have sallow complexions, and appear to be of the same race as the inhabitants of Bussahir. In fact, many of the coolies employed as carriers between Simla and Kalka are men from these states, who are attracted there by the wages, which average one anna a day in their own districts, but from four to six annas on the left bank of the Sutlej. The men are generally tall and strong, but few of them are handsome. Many of the young women are pretty, but at the age of 20 or 25 become coarse and stout. The dress of both sexes is nearly the same. It consists of a drab-coloured woollen frock, trousers of the same or of leather, and a flat skull-cap, generally black, with sandals made of coarse grass. The woollen cloth called puttoo is manufactured by themselves, and resembles thick coarse blanketing. It is sold in pieces of 10 inches in width and about 21 feet in length, at 2 rupees 8 annas or 3 rupees a piece, according to the quality. Both sexes wear a girdle around the waist, and the men generally go bare-legged during the hot weather. They seldom, if ever, wear shoes; the richer classes, however, wear worsted stockings and shoes when they go out. The women, instead of the cap, sometimes have a coloured piece of cloth tied round their head, and occasionally twist their hair into one long plait, the end of which is ornamented with slips of coloured cloth or shreds of worsted.

Sati was greatly followed in Mundi by the rajas, and by the principal Rajput families, but by the treaty with the British in 1846 it was discontinued. When raja Tori Sain died in 1826, 17 women, mostly slaves, were burned with his body, and 18 with that of Zalin Sain, who died in 1839. Infanticide also was very common.

The *Chumba-guddi* race of the Chumba Hills say they are Rajputs, and of the Gaddi-jat. They are somewhat short, but strong, and cleanly in their habits. They are sharp, and able to impose on their less knowing neighbours. Most of the witch-finders are of the Chumba-guddi race, and the race may always be known by their peculiar conical caps, with lappets to turn down over their ears, like an English travelling cap. When Europeans made their first appearance in the Kangra valley, these men had very slight notions of caste, and would eat or drink anything the Europeans gave them, but since their contact with the natives of the plains they have become as bigoted as any Hindu. The Gaddi are hill shepherds about Kangra and elsewhere.

The *Luhuli* people are a race distinct from the people of Kulu or of the Chumba range. The *Luhuli* men are short, but sturdy, very ugly and very dirty. Their women are decidedly plain. The dress of both sexes is a black woollen frock with drawers, and a woollen plaid, with black circular caps of felt. The women let their hair fall from the back of the head in long plaits.

Chitral, Upper and Lower.—An independent state, consisting of the upper part of the Kunar valley, Afghanistan. It is bounded on the N. by the Hindu Kush, dividing it from Wakhan and Badakhshan; a crest on the E. separates it from Gilgit and the parallel tributary valleys of the Indus; on the S. it is separated from Panjkora, and on the W. from Kafiristan. The population is Muhammadan, Kafirs of the Kamuz, Askini, and Ashpin tribes. They are the Dhangar race. The men are tall and well made, but exceedingly cowardly; the women are remarkable for their beauty and their immorality. They bear a strong resemblance in their features and colour to the hill people of Chumba and Kangra, symmetry of form, black eyes and hair. They speak a dialect of Dardu, but generally use Persian, Pushtu, and Turki. The soil is fertile, climate severe in winter. The rulers of both Chitral are Sunni in faith. They capture their own Shiah subjects and the Shiah Posh, and sell them as slaves; sometimes whole families are sold. Boys and girls are the most prized of all the slaves brought to the Turkestan market, and fetch from Rs. 100 to Rs. 500; but the more comely women, Rs. 500 to Rs. 1000. The exports are korah kashkari or unbleached silk; choga, made of shawl-wool, with which all animals, dogs, and particularly goats, are provided.

The *Rawat* or *Raji* of Kamaon lead a wandering and uncivilised life in the forests on the eastern borders of the district. They are a remnant of a prior population, whom Mr. Traill thinks are of the same race as the Dom. The *Rawats* appear to have been a knightly and equestrian order among the Bhils, and they have a tradition that their ancestors were the aboriginal princes of Kamaon. The terms Dom and Rawat are not peculiar to Kamaon. The Dom is found in many parts of India, and Rawat is the name of another widely disseminated race. The *Rajivaru* of Kamaon speak Telugu. They practise medicine. The tongue spoken as the hill dialect of Kamaon is in the main Hindi, but has affinities to the Bengali in some of the popular terminations, in the verb to be, and in some other particulars.

The *Chumang*, *Chamar*, or *Kohli* of the adjacent Himalayan province on the west, evidently belong to the same race. They are a degraded class, usually darker than the Kanet (or, proper, Kanawari), and some are said to have woolly hair.

Bhuksa.—In the hills of Kamaon, in the forests from Sabna on the Sarda to Chandpur on the Ganges, is a tribe called *Bhuksa*. They claim to be descendants of the Powar Rajput, to have been expelled from Dhar, and taken refuge first in Oudh, and then in their present location.

The *Kanet* is an agricultural race in the Simla Hills and east of the Sutlej. They are a local tribe, holding most of the land on the Simla Hills. They are inferior in position to Rajputs, more perhaps of the level of the Kurmi and Lodhi, but they are often educated, and are generally ministers to the Rajput chiefs. Their women are very nice looking, and all the tribe who are not (in the upper hills) in contact with Tartars are quite Aryan, though not very large. They follow a corrupted Hinduism; their villages contain Hindu and Buddhist temples, and the people worship at both; and their marriages are conducted by Lama priests according to the Buddhist

ritual, and the Hindu and Buddhist Kanets intermarry. The northern Kanets are polyandrists, but one brother remains at home while the others are away on business, and the women are often childless. The southern Hindu Kanets are not polyandrists.

The Tibetan colony at Mohasu, just above Simla, are powerful, ruddy-looking people, entirely unlike Indians; their women are industrious, but very unattractive.

In Lower Kunawar the preponderating language is Hindi, and is called *Milchan*, but the Bhot preponderates in Upper Kunawar. The *Lubrung* or *Kanam*, and the *Lidung* or *Lippa*, are varieties of the *Milchan*. In *Sungnam* the word *Thebur-skud* is used to designate all variations from the regular form of speech. In Kunawar, Buddhism decreases in the central districts, and disappears in the southern, where Brahmanism in an impure form occurs with local gods and irregular priests, every bill having its deota or genius. Polyandry is general in Kunawar, from the higher classes and lowest Chamars, one family having one wife, the elder brother being the more special husband. It is called *Kurpa*. The mean number of inhabitants to a house in various parts of Kunawar is six.

The *Kunawari* or Kanet are the principal race in Lower Kunawar. They are physically Aryans, but are Tibetans in disposition and manners.

In the upper valleys of the *Sutlej*, in *Spiti* and *Kunawar*, are mixed races exhibiting much Tibetan blood, and in religion apparently more Buddhist than Hindu.

The *Kohli* of *Kunawar* are a distinct and degraded class, darker than the Kanet, and some are said to have woolly hair. Colonel Cunningham thinks it probable that they belong to the ancient *Sudra* or pre-Aryan race. They seem allied to the *Doma* of *Kunawar*. Indeed, *Kohli* of *Simla*, *Garhwal*, *Kunawar*, and the plains of Northern India call themselves indifferently *Kohli* or *Chamarai*. They are an aboriginal race. They are distinct from the Kanet, who regard the *Kohli* as out-castes, and neither eat nor intermarry with them. In the *Himalaya* the *Kohli* are polyandrists. They are porters and labourers and weavers, village musicians, playing on the pipe and tabor, each tune with a marked character of its own. Every *Kunawar* village contains a portion of them. The *Kohli* are not Chamars or curriers, but are cultivators, weavers, palanquin-bearers, village servants, fishermen. They worship snakes, also the *Gramma-devata* or village lares et penates, and are occasionally *pujaris*. They are cleanly; they drink, but in moderation. In *Gujerat* many hold petty chieftainships, with estates attached to them. They are not allowed to enter temples or make offerings except by the hands of priests.

The *Bhotia* race occupy *Darma*, *Chandans*, and *Byans* in the N.W. *Himalaya*.

Sipal is the name of the men of *Siba* in *Darma*. In *Byans* a dialect of Hindi is spoken. *Byans Rikhi* is a mythical saint, who is supposed by the people of *Byans* to be dwelling on the top of the *Kelirong* mountain. He is supposed to represent the *rishi Vyasa*.

Captain W. C. Hay describes the *Bhotias* of *Spiti* in the N.W. *Himalaya* as a physically robust race, with strongly-marked, weather-beaten countenances, of middling height, with flat faces

and noses, and in general small eyes, the skin of a light-brown colour, with a ruddy hue derived from the reflection of the sun from the snow. The smallness of the eye is particularly mentioned by observers in other localities, as in *Bhutan*.

The *Sutlej* people are amiable and gentle, free of low cunning, having the appearance of a mixed race between the Tartar and the common hillmen. They are fair, well made, and strong, but are filthy and indigent. The women have a toga fastened round the waist.

The *Kulu* province consists of the mountain basin of the *Beas*, and the west bank of the *Sutlej*. *Sultanpur*, its capital, is elevated 4584 feet. The chain bounding the *Sutlej* on the west is considerably higher than that on its east bank, and is crossed into *Sukeyt* by the *Jalauri* pass, elevated 12,000 feet. The province of *Chumba* bounds it on the west, and the physical features of *Kulu* and *Chumba* are similar. The poorer *Kulu* people wear only a blanket wound around the waist, and one end flung across the shoulders and pinned across the chest; men and women often dress alike, but the long hair of the women is plaited in one tress. The women of *Kulu* and the adjoining states are inordinately fond of ornaments. Both men and women suspend round the neck several amulets of mother-of-pearl engraved with mystical figures. Polygamy is common.

Dogar, an uneducated, ignorant tribe, originally Hindu or *Chauhan* Rajputs, but converted to Muhammadanism at some unremembered date. They dwell on the borders of the *Panjab*, chiefly along the banks of the *Sutlej* river. They are indifferent farmers and cultivators. Like the *Pachada*, the *Dogar* wears a waist-cloth or loongee.

The *Chilas* country is bounded on the north by the *Indus* river, on the south by the watershed of the ridge over *Lulusur* lake, on the east by the watershed of the same ridge as above *Lulusur* lake, culminating in the lofty peak of *Munga Parbut*. The *Astor* boundary marches with *Chilas* here on the west to a point beyond the village of *Sazeen*, where the *Indus* takes a turn to the south-west. *Chilas* affords good pasturage, but lies under snow for a considerable portion of the year.

The *Sheen*, claiming an Arab descent, are the proprietary and governing class. Crime is rare, women have more liberty and power than among Muhammadan tribes, but breaches of chastity are punished by death. They were visited in 1866 by Dr. Leitner at the request of the Bengal Asiatic Society. Their language seems distinct from *Pushtu*, *Persian*, and *Hindi*, and is not understood by their neighbours the *Syud* race, who inhabit *Dareil* and *Tankir* to the west of *Gilgit*. According to their own traditions, the inhabitants of *Chilas* were conquered about the middle of the 18th century, and converted to the Muhammadan faith. Up to about 1840 the *Kaghan Syuds* received quantities of gold dust as religious dues from the people of *Chilas*; but when the *Syuds*, aided by the *Sikhs*, failed in an attack on *Chilas*, the dues were abandoned. A second attack by the *Sikh* nation was successful, and a small annual tribute of 3 tolas of gold dust and 100 goats is paid to the *Kashmir* durbar.

The *Gilgit* territory is in lat. 35° N. and long.

74° E. The Indus river runs through it from N.E. to S.W. It is on the southern declivity of the Hindu Kush, between Chitral on the west and Balistan (Little Tibet) on the east. In the Bannu valley there are races intermixed, of whom may be noticed the Dardu of Gilgit and Chilas. Gilgit, in Tibetan Gylgyid, has an area of 2500 square miles on the right bank of the Indus.

The *Dard* race, lying along the Indus to the westward of Ladakh, speak three distinct dialects, and use the Persian character in writing. The three dialects of Dardu are called *Shina*, *Khajuna*, and *Arniya*. The *Shina* dialect is spoken by the peoples of Astor, Gilgit, and lower down in Chilas, Dareil, Kohli, and Palas, on both banks of the Indus; the *Khajuna* by the people of Hunza and Nager, and the *Arniya* in Yasan and Chitral. Astor has an area of 1600 square miles on the left bank of the Indus. The Dard or Durd are supposed by Vigne to be the *Dadica* (*Δαδίκαι*) of Herodotus, and the people who now occupy the country called Dardu. According to Burnes, the mir of Badakhshan, the chief of Darwaz in the valley of the Oxus, and the chiefs eastward of Darwaz who occupy the provinces of Kulub-Shughnan and Wakkan north of the Oxus, also the hill estates of Chitral, Gilgit, and Iskardo, are all held by chiefs who claim a Grecian descent. The whole of the princes who claim descent from Alexander are Tajak, who inhabited the country before it was overrun by Turki or Tartar tribes. The Kashmir people have their own peculiar language. The Balti people of Little Tibet say that Ladakh, Iskardo, Khopalu, Purik, Nager, Gilgit, and Astor are distinct Tibets.

Chaprun, in lat. 31° 27' N., and long. 79° 33' E., is described as a large populous place. When any man of property dies, they bruise the body to pieces, bones and all, and form it into balls, which they give to a large species of kite, which devour them. These birds are sacred, kept by the Lamas, and fed by them, or by people appointed for that purpose, who alone approach them; others dare not go near them, perhaps from superstitious motives, for they are held in great fear. This ceremony is very productive to the priesthood, an expenditure of very large sums being made on the decease of any great man, and the Lamas receiving presents of very fine and expensive caps. Poorer people are sometimes buried, and at others thrown into the river.—*Fraser's Himalaya Mountains*, p. 338.

The number of the houses of Ladakh is estimated at 30,000, with 210,000 inhabitants, or 433 persons in the square mile. In Ladakh the nuns and monks bear a large proportion to the population. It was subject to Lhasa until A.D. 1834, when it was seized by Zorawar Singh, general of the raja of Jamu. The Ladakh race call themselves *Bot-pa*, speak Tibetan, and profess the religion of Buddha under a hierarchy of monks called Lamas. The term Tibet is unknown to the people, as also to the Indians, who call them Bhotia, and their country Bhutan. Ladakh belongs partly to the Jamu raja, and partly to the British, and is Bhot along the banks of the Chandra and Bhaga, but Hindu after their junction. To the north of the Ladakh country the people of Yarkand and Khoten speak Turki. To the west, beyond Balti, the people of Astor, Gilgit, and Hunza-Nager speak different dialects

of Dardu, while the Kashmiri have their own peculiar language. To the south, the people of Chumba, Kulu, and Bussahir speak a dialect of Hindi, and to the east and south-east the people of Rudok, Chang-Thang, and Ngari speak Tibetan only. In the Ladakh frontiers of the Western Himalaya, the Bhots salute by raising the back of both hands to a height even with the forehead, and then repeatedly describing a circle in the air with them by dropping the fingers downwards, and turning the palm inwards. This is similar to the Muhammadan practice of Billaen-lena, where a woman is supposed to take upon herself all the evils which would befall the person whom she addresses. Polyandry prevails in Ladakh. The brothers of one family have a single wife in common, and the children take name and obey, as head of the family, the eldest husband.

Beas.—Polyandry prevails in the Beas valley, but the general immorality is ascribed to the large numbers of Yarkandi traders.

TIBET is called by the Chinese Tsang, also Si Tsang. The Tibetans call their country Bod-yul, and the Chinese also call it Fuh-kwoh, or the land of Buddha. The term Tibet is from Tu-peh-teh (Tu-bod). It has four territorial provinces, viz. Tsien Tsang or Anterior Tibet; Wei or Chung Tsang, Central Tibet; How Tsang, Ulterior Tibet; and Gnari or Western Tibet. Tibet is now governed by China through the Buddhist hierarchy, the Dalai Lama, and in this manner it is a dependency of China. (See Dalai Lama; Tsong-Kha-ba.) The Dalai Lama and Panshen Lama are aided by a council of four laymen, entitled Kalon or Kablon, i.e. Minister of State, under the direction in chief of the two Imperial Commissioners or Residents appointed from Peking. The authority of the Chinese administration being rendered the more complete by the long minorities which are entailed at each successive re-embodiment of the two supreme ecclesiastical dignitaries.

China (Gyanak, TIB.) is on the east, India (Gyagar, TIB.) is to the south. A man of the country is called Bod-pa, and a woman Bod-mo. The Turk and Mongol races on the north of Tibet are called by the Tibetans Hor and Sok-po (Hor-Sok). The hill people of India who dwell next to the Tibetans are called by them by the general name of Mon or M'lon; their country, Mon-yul; a man, Mon or Mon-pa, and a woman, Mon-mo. Khapolor, Chorbad, and Keris on the Shayok river, Khartakshe, Totte, and Parguta on the Sing ge chu, Shigar on the Shigar river, and Balti and Rongdo on the Indus, are Tibetan districts. Little Tibet or Baltistan contains about 12,000 square miles, is about 170 miles long, and lies between 74° and 76° 35' E. Little Tibet is called by the Kashmiri Sri Butan.

The Hun or Turk for 2000 years, up to the 3d century of the Christian era, predominated in the eastern part of the great plateau of Tibet. It was not, however, until B.C. 313 that the chief Tibetan tribes, the Hun or Ngari, Dzang, H'lassa, Wei or U, and Khan, were for the first time united with the State. In the 7th century of the Christian era its sway had extended from Kashmir on the one side to the Yo-long on the other. It continued to flourish for some centuries, frequently waging war on China, and compelling the emperor to accept ignominious conditions of peace. From the 7th to the 10th century of this era the

Tibetans extended their dominions along the whole length of the Himalayas, and into Kashmir at the one end, and into Assam and Bengal at the other. Bhutan is so completely Tibetanized, that it may be said to advance the Tibetan frontier near to the plains of Assam and Bengal. For a period of five or six centuries, up to the 12th century, Tibet held a large portion of the Himalayas, and seemingly their dominion extended also into the plains, in the sub-Himalayas, in Assam, and in Bengal. Chinese historians, indeed, relate that the Tsang dynasty, from the 7th to the 10th century, extended their conquests to the Bay of Bengal, to which they gave the name of the Tibetan Sea. Bengal appears to have been conquered about the middle of the 7th century.

In the 12th century the Chinese conquered Eastern Tibet, and towards the end of the century Independent Tibet was shorn of its power and prestige, and reduced within narrow limits. When Chengiz Khan, early in the 13th century, conquered Northern China, he overran Tibet, and brought to a final close the era of its political greatness. But though the West or Middle Tibetan so early in the Christian era crossed the snowy range, and occupied a considerable portion of the sub-Himalayas, and more or less modified their Gangetic inhabitants, their physical influence on most of the Gangetic tribes—Himalayan, Lowland, and Vindhyan—appears to have been so slight that it is now mostly imperceptible. It is certain that a great influx of them took place some centuries after Christ.

Tibetans do not seem to have dislodged the ancient tribes in the tract along the foot of the hills from Gauhati to Sylhet, but only to have conquered and modified them; and the Changlo and Abor languages appear to place it beyond doubt that it was chiefly through the partially Tibetanized tribes and languages along the northern margin of Assam, and in contact with the dominant Tibetan population behind them, that an ethnic Tibetan influence was maintained in the valley of Assam and the countries to the south of it. The races in this region are chiefly Bhot, Turk, and Mongol. The Balti people, the people of Little Tibet, the Byltæ of Ptolemy, though Tibetan in language and appearance, are all Muhammadans, and differ from the more eastern Tibetans of Leh (who call themselves Bhotia or inhabitants of Bhot) by being taller and less stoutly made. Their language differs considerably from that of Leh, but only as one dialect differs from another. The Bhot have been extending westward. As a general rule, the Himalaya divide Hindustan from Bhotland, but there are Bhot in several parts south of the crest of those mighty mountains in Garhwal and Kamaon. From Simla, for several hundred miles to the east, all the passes through the snowy range are occupied by the Bhot. They have a monopoly of the trade across the Himalaya, are carriers, loading the goods on the backs of sheep.

The Tibetan element is absent beyond the Kali, i.e. in Kamaon, but in Bussahir it is strong where Tibetans occupy the higher tracts.

Garhwal is a non-regulation district under the N.W. Provinces of British India. It is a country of very great extent, though of small comparative value. Many of the larger rivers of Upper India, and all those which form the origin of the Ganges,

have their rise in its mountains, and hold their course through its territory. Srinuggur, the chief town, is on the south bank of the Alekzanda, about 20 miles above its junction with the Bhagirathi at Deo Prague, where a strip of level ground stretches along for 3 or 4 miles, forming the valley known by the same name as the town. The people of Garhwal are Bhot, dwelling in the passes and their neighbourhoods at heights above 6000 feet. The pass-men state that ridges which within the memory of man were covered with forest and pasture lands are now covered with snow, showing the extension of the snow zone. The Bhot here, as elsewhere, is an agriculturist, and is assisted by slaves, who live under the roofs of their masters. The people in the Mana, Niti, Juwar, and Byanse passes are supposed to be immigrants from Tibet who drove out an earlier body of Hindus, and many of the chief families trace their origin to a Tibetan locality. The inhabitants of the Darma pass are said to be a body of Mongol left in Kamaon by Timur. The Darma inter their dead for a time, and in the month Kartik exhume and burn them, but the other pass-men burn their dead on their demise. The Darma practise divination, taking their omens from the warm livers of sheep sacrificed for the purpose. The women of the Darma and Byanse pass dress alike, and these two clans eat the yak, and would eat the cow; while those of Mana, Niti, and Juwar abstain from beef of all kinds, and look down, as on an inferior caste, on the Darma and Byanse. The Juwar nearest India have the largest trade, and resort to an annual fair in September at Gartogh, the residence of the Lhasa viceroy. These passes are the roads from India to Nari or Gnari, Tibetan provinces of the Chinese empire. The Garhwal people have a passionate love of country and home.

The Bhot of Ladakh is strong, hardy, short, and square, with a decidedly Mongol physiognomy,—by which is meant a flat face, broad cheek, depressed nose, very large ears, oblique and narrow eye curtailed at the corners, black hair, and low stature, their average height being 5 feet 6·1 inches; the skulls are less Mongolian, having a capacity of 72 cubic inches, 80 cubic inches being a fair capacity for a European.

Towang-raj.—Proceeding from Kokonor to Yunnan, going from north to south, are the Sokpa, the Amdo, who now speak Tibetan; the Thochu, the Gyarung, and Manyak. These bear the Chinese designation of *Sifan* or Western Aliens, whilst the Tibetan call them Gyarang-bo. Turning westward, after passing through the Kham districts of Gyarung and Khwombo, we come to the region of the Takpa and Tak-yul, which is the Towang-raj of the British in India. Of these the Gyarung are the most important tribe. They reckon 18 banners under 18 chiefs. In Tibetan, 'Gya' and Chinese 'Fan' have the same meaning, viz. foreign or alien.

In Southern Tibet, also, there are numerous scattered Horpa and Sokpa, as there are many Bodpa in Northern Tibet. Po or Pha means man. In Tibetan and several other cognate languages, po, pa, is restricted to the male sex, and mo, ma, to the female.

The Sok occupy the eastern part, and also the wide adjacent country called Koko-nor and Tangut by Europeans, and Sok-yul by the Tibetans.

The northern part of Tibet, lying beyond the Nyen-ohhen-thangla range of mountains, and between it and the Kwan-leun or Kouen Lunchain, is occupied by two tribes, the Horpa and Sokpa. The Hor occupy the western part of that region, also a portion of Little Bokharia and of Zangaria, where they are designated Kao-tse by the Chinese, and Uigur or Ighur by themselves. Mr. Hodgson considers them to be Turk.

The eastern part of Tibet, between the elevated lake plateau and the Yun-long mountains, appears to be occupied by Mongol tribes called Sok. This word is said to mean pasture, and to be the root of the term Scythia.

The lake plateau is occupied by Turki tribes called Hor, a term which is said to mean highland.

The *Sifan* region is from 40 to 60 miles broad; it is a rugged, mountainous declivity from the lofty plateau of Khum to the low plain of Szechuen. Within it are the Takpa, and outside are the Gya-mi.

Horsok is a compound word used by the Tibetans to designate the nomades who occupy the whole northern part of Tibet, viz. that lying beyond the Nyen-ohhen-thang-la range of mountains. These two races are the Hor or Horpa and the Sok or Sokpa. The Hor lying on the western half also occupies much of Little Bokharia and Zangaria, and the Sok dwell on the eastern half and the wide adjacent country called Koko-nor and Tangut by Europeans, and Sok-yul by Tibetans. South of the Thang-la chain are numerous scattered families of both tribes, dwelling amongst the Bodpa or Tibetans proper. The Chinese call the Horpa Kao-tse. The Horpa are a Turk race.

The term *Kao-tse*, used by the Chinese to designate the Horpa, is supposed by Mr. Hodgson to be the Khach'he of the Tibetans, literally 'wide mouths.' Mr. Hodgson thinks the Sokpa of the Tibetans the same as the Olet and Kalmuk of Remusat and Klaproth.

The *Chakpa* or *Jagpa* and the *Drokpa* or *Brogpa* are Bhot occupants of the central part of Northern Tibet. Mr. Hodgson supposed them a mixed race joined together for predatory purposes. They are robber bands between the Horpa and Sokpa, recruiting from the Bodpa (Tibetans proper), Horpa, Sokpa, and Drokpa. The Drokpa also dwell between the Horpa and Sokpa. They are distinct from the Dukpa or Brukpa of Bhutan.

KASHMIR DOMINION, as at present formed, comprises the provinces of Jamu, Kashmir, Kishtwar, Zanskar, Ladakh, and Balti, an area of 68,000 square miles. The territory is ruled by a Rajput sovereign of the Dogar clan; but the people of the vale of Kashmir are of Aryan descent. The hills westward from Kashmir are inhabited by Kukka and Bumba, but towards the river are Afghan tribes. In the hills south of Kashmir and west of the Jhelum to Attock and Kalabagh on the Indus, are Gukkar, Gujar, Khatir, Awan, Junjooh, and others. Eastward of Kashmir are the Bhot race, Balti, and Ladakh. The races and broken tribes of the region will be found noticed under 'Kashmir;' it will suffice here to mention that the more prominent are, Kashmiri, Dogra, Brahman, the Bamba, the Khatri, the Thakur, the Ch'hib, Jat, Gukkar, Gaddi of Jamu, Dard, Dom, Megh, Batal.

Skurdo or *Iskardo*.—Little Tibet is so called by the people. It was conquered in 1840 for the

raja Gulab Singh, by his general Zorawar Singh, with his Dogra troops. *Skardo* is called by the Lamas of Ladakh, *Skarma-m Do*, meaning the enclosed place or the starry place. *Skardo* is also designated *Balti*, *Balti-yul*, *Balor*, *Palolo*, and *Nang Kao*. *Iskardo* is a Muhammadan corruption of the Tibetan name *Skardo*, or *Kardo*, as it is very commonly pronounced. The Muhammadans of Asia, as a rule, are unable to pronounce two consonants together, but prefix a vowel, as Mr. i-Smith, Mr. i-Stewart.

rGylfo, the title of the ruler of *Iskardo* or Little Tibet, is derived from two Balti words, *rGyl*, powerful, and *Fo*, a man. The queen is styled *rGyl-mo*. Mr. Vigne points to this as the original of the title of Guelph, belonging to the royal family of Great Britain, and of the term *Gylfe-koniger*, still used to designate the old kings of Denmark.

The mountains which surround the *Iskardo* plain rise at once with great abruptness, and are very steep and bare. The houses of *Iskardo* are very much scattered over a large extent of surface, so that there is no appearance of a town. The people occupying Little Tibet are the *Byltæ* of Ptolemy. They have on the east the *Khor* country, which is inhabited by a people supposed to be the *Chaurancei-Scythæ* of Ptolemy.

The *Balti* of *Iskardo* also dwell in the valley of the Indus, above the junction with the Gilgit river. *Skardo* is a Bhot tract, but the people are Shiah Muhammadans. Their features indicate a Tibetan origin, and their language is decidedly so. They are a quiet people, and the Kashmir ruler has enlisted many of them. The people are strong and hardy; they grow corn and cut water-courses like the people of Rongdo, irrigating the land and using manure. They are fond of out-of-door manly games.

Khor, a territory S.E. of Ladakh and eastward of the *Byltæ*. Its people are supposed by A. Cunningham to be the *Chaurancei-Scythæ* of Ptolemy.

Nubra, *Pangong*, and *Rodok* districts, in the basin of the Shayok river and its affluents, lie on the S. flank of the Kouen Lun, from Balti to Nari, and have Ladakh as their southern boundary. With the exception of Nari, this is the most lofty and most sterile part of Tibet, the axis of the Kouen Lun being probably upwards of 18,500 feet, the valleys 16,000 to 17,000 feet, and numerous peaks rise 20,000 to 23,000 feet. The Kara-korum pass is 18,300; the salt Pangong lakes, 13,400 feet. The *Changpa* are a semi-nomade tribe near the Pangong Tso pass. They dwell, in their grazing grounds, under huts (galkol) made of the yak's hair. The people there call themselves Bhot.

Changpa are a tribe of Hungrung Tartars occupying 378 square miles.

Chang-Thing dwell on the northern plains, to the north of Ladakh, supposed to be the *Chatæ-Scythæ* of Ptolemy.

The *Dras* district extends from Zojila to Channagund. *Dras* adjoins Kashmir, the intercommunication being by the Zoji pass, a remarkable depression of 11,300 feet, through which flow the moist winds of Kashmir, and *Dras* is the most humid and fertile province of Tibet. *Dras*, its capital, is 10,150 feet above the sea, and consists of half a dozen hamlets dispersed over the inequalities of a spacious basin in the close-set hills.

Parang and *Zanskar*, *Piti* and *Guge*, are Tibetan districts; *Piti* and *Hungrung* are two valleys. That of the *Piti* river is entered from Kanawar by the *Hungrung* pass, elevated 14,800 feet; the *Parang* pass is 18,500, and leads over the range dividing the *Parang* from the *Piti* rivers. All east of *Piti* is Tibetan.

Zanskar occupies the north slope of the main Himalayan chain, parallel with *Kishtwar* on the south. *Padum*, the capital, is 12,000 feet above the sea.

NEPAL is an independent kingdom in the Central Himalaya, extending for 500 miles along the Himalaya, from the western extremity of *Sikkim* to the eastern border of *Kamaon*, from which it is separated by the river *Kali*. Its capital, known as *Khatmandu*, is called *Yi-des* by the *Newar*, and by the *Parbattia* or *Pariah* race it is known as *Kulti-pur*. It is situated at the junction of the *Bhagmutty* and *Bishmutty*, is 4000 feet above the sea, and about 30 miles from the plains of India. The valley of *Nepal* intervenes between the snowy range and the valley of the *Ganges*, and has been a refuge in which *Aryan* and *Bhot* tribes have found a shelter, and notice of them will be found under *Nepal*, sufficing it here to mention that the ruling tribe, the *Khas* or *Sahi*, form part of the martial *Gurkha* race.

BHUTAN, on the N.E. of British India, is situated between lat. $26^{\circ} 30'$ and 28° N., and long. $88^{\circ} 45'$ to $92^{\circ} 25'$ E., and occupies from the southern declivities of the great central ridge of the Himalaya mountains to the foot of the inferior heights which form a talus at their base, and constitute the natural northern boundary of the *Assam* valley eastwards from the *Sikkim* to where the *Brahmaputra* passes through the mountains. *Bhutan* is one of the long narrow states lying upon the southern slopes of the Himalaya; the territory consists of a number of rough transverse chains of hills at right angles to the parent range, which forms the backbone of Asia, with precipitous valleys and glens, at the bottom of each of which runs a mountain stream, and the overlooking mountains are covered with snow in June and July.

In *W. Bhutan*, the mountain ranges are lofty and rugged, and the river courses very deep and generally narrow. At *Panaka*, the *Pachu* is only 3700 feet above the sea. The mountain mass, however, which descends from the axis of the Himalaya, to separate the *Monas* from the *Subansiri*, attains an elevation of at least 24,000 feet, as far south as latitude 28° . Three peaks upon this are visible from the *Khasya* mountains, and spurs descending from it were ascended to an elevation of nearly 12,000 feet by Mr. Booth in 1849, in a district north of *Bishnath*, in Upper *Assam*, which is inhabited by the *Dophla* race.

Bhutan is from *Bhutan*, the end of *Bhot*. Its capital is *Tassisudon*. The dominion is known to the Tibetans by several names,—*Lho-pa-to*, *Lho-mon-k'ha-zhi*, and *Lho-bruk-pe-yul*, or simply *Lho*, the south. *Lho-pa* therefore means a native of *Bhutan*, and this is the name by which the *Bhutanese* call themselves; but they are also known as the *Duk-pa* and the *Bruk-pa*. *Duk* means the sect of *Lamaism* prevalent, and *ba* or *pa*, of or belonging to. The *Hindu* shastras or sacred writings call the *Bhutanese* *Pla-va*, the *Lepcha* call them *Pra*. *Dharma raja* is the title of

the spiritual head of *Bhutan*, and he is supposed to be an incarnation of *Buddha*.

Bhotia is the Sanskrit, and Tibetan the Anglo-Persian, name of the people who call themselves *Bod-pa* or native of *Bod*. The *Newar* of *Nepal* proper call the cis-nivean *Bhotia*, those south of the snows, by the name of *Palu-sen*, and the trans-nivean, those living beyond the snows, *Tha-sen*. The Chinese call the *Mongol* *Tha-tha*. *Bhotia* generally occupy *Cachar*, though some families are planted in the lower lands.

The population has eight principal and a few minor classes, all pure Mongolian, and in addition there are the *Khampa*, who live in tents and booths, and a vast number of *Assamese* and *Bengali* slaves. They are *Buddhist*, but eat the flesh of goats, sheep, and cattle. The poor people use wheat and barley. All classes use intoxicating liquors. The favourite drink is *chong*, prepared from wheat, barley, or rice; it has an agreeably acid taste.

The *Lhopa* is the dominant race, but they have a tradition that before they entered it, *Bhutan*, or at least the eastern part of it, was occupied by the *Koch'h*. The *Lhopa* are agricultural and industrious, employing artificial irrigation on their patches of soil in the valleys. They are also distillers, and make paper from the bark of the *Diah* tree. The *Lhopa* are tall, many being more than 6 feet high, and fairer than the people of the south of Europe. Hair black; eye small, black, with pointed corners, as if artificially stretched; eyebrow slightly shaded; eyelashes scarce; below the eyes, the face is broadest, and rather flat, but narrow from the cheek-bones to the chin; this character of the countenance being more developed in the characteristic Chinese farther east, to whose features this is the first approach. Their skins are remarkably smooth, and most of them arrive at a very advanced age before they can boast even the earliest rudiments of a beard; they cultivate whiskers, but the best they produce are of a scanty straggling growth.

The *Lhopa* are quarrelsome and cruel, but not brave; and Dr. Hunter says the rude, unlettered part are aimless, both morally and intellectually.

The higher classes are the *Kham-pa*, the *Bhot-pa*, and the *Kushi*.

The *Kampa* or *Kham-pa* are properly the Eastern Tibetans; but this nomadic tribe is spread widely over Tibet and a portion of China, and their name is also applied in *Bhutan* to the adjacent division of Tibet to the south of *Tsang-po*. The present royal family of *Sikkim* is a *Kham-pa* importation. A previous dynasty was the *Tsang*. *Wang* is a Chinese title equivalent to *regulus*, which has been adopted in Tibet, and the *Bhutan* class who bear it may probably be the descendants of the original Tibetan rulers during the *Tsang* dynasty.

The *Sangla*, the *Ramtang*, and the *Tebula* are inferior classes, who are not eligible for the higher offices of government. They are supposed to be remnants of the pre-Tibetan tribes of *Bhutan*, and to have been originally of the same stock with the *Abor*, etc., that is, the *Gangetic* race, although they have become assimilated to their Tibetan conquerors.

There are four dialects of Tibetan in use, viz. the *Sangla*, which is spoken south of *Tsangong*; the *Bramhi* in the north as far as *Tongso*; and the *Ga-long* and *Bom-dang* beyond the *Bramhi*, to the west.

The Bhutanese Lhopa, Dukpa, or Brukpa are an undoubted branch of the Tibetans in form, customs, and language, although they differ slightly from their trans-Himalaya relations. True Tibetans are spread over the higher habitable band of the mountains from Bhutan to Kamaon, or from the Dhanri to the Kali. They are called Rong-po, Siena, or Kath-Bhotia, Serpa, etc., but Rong-bo or lowlander is the name now applied by the Tibetans to the Bhotias or Tibetans on the southern side of the Himalaya, and it seems to have been formerly applied by the early Tibetan conquerors to some or all the Gangetic or Tibeto-Gangetic tribes.

The Lhopa or Bhutanese, from their unscrupulous marauding habits, are on bad terms with every one of their neighbours. Though nominally subject to Tibet, were the annual tribute withheld, it would not be inquired after, so anxious are the Tibetans to have no dealings with the Bhotia. For years all Bhotias entering Tibet were disarmed at the frontier, beyond which the tribute-bearers were permitted to proceed. The British annexed the Doars of Bhutan from the Lhopa in 1865; and the Sikkimese have, less than the Tibetans, to do with the Bhotia, whom they look upon as unscrupulous robbers, while to the east the Towang raja has to keep up a frontier force for the especial purposes of preventing Bhotia raids.

Tak or *Tak-pa* or *Tak-poni* is a district enclosed within the great bend of the Brahmaputra; it lies in a line from Lhassa to Jorhat in Assam, and overlies the north-eastern part of Bhutan. It is the country of the *Tak* race.

The *Tak-pa* language seems to be spoken only in the country of the Towang raja, on the upper habitable portion of the southern side of the Himalayas, to the east of Bhutan. It is more Sifan than Bhotian, though it has dialects of the latter at least on two sides of it. This province was conquered by the Tibetans.

SIKKIM, with 1600 square miles, consists of the valley of the Tista river, which with its tributaries drain the whole territory. Its great tributary is the Ranjit river, which, at first separated by a mountain range, joins it from the west, flowing for a short distance parallel to the plains, through a deep ravine not 1000 feet above the sea, to the north of an elevated transverse range. Being opposite to the Gangetic valley, it is open to the full force of the monsoon; its rains therefore are heavy, almost uninterrupted, and are accompanied by a dense fog and a saturated atmosphere. The rainy winds sweep almost without interruption up to the base of Kanchinjanga (28,178 feet), the loftiest mountain and most enormous mass of snow in the world. The snow-level is here 16,000 feet. The two principal sources of the Tista river are the Lachen and the Lachung; these run in two valleys, which are separated by a lofty snowy range projected to the south-west; the valleys are somewhat sheltered, and the perpetual snow-line rises to above 18,000 feet. From the level of the sea to an elevation of 12,000 feet, Sikkim is covered with dense forest of tall umbrageous trees. At 10,000 feet, on the summit of Tanglo, yew appears. There are in Sikkim about 2770 species of flowering plants, and 150 ferns. In the Darjiling district, in addition to the Europeans, Hindus, and Muhammadans from the plains, the population consists of Nepalese; of the Bhotia

from Bhutan, Tibet, and Sikkim; of the Lepcha and Mechi, who are considered the prior occupants of Sikkim. The Rajbansi of Sikkim are the Koch or Kooch race, of the same descent as the raja of Koch-Bahar, on which account they call themselves Rajbansi. In the plains of Sikkim, the Rajbansi and Bengali are in equal numbers. The Mechi inhabit that portion of the Terai which lies under the hills. They are a migratory race, who live by cultivating the virgin soil. They have no caste distinctions.

The *Bhotia* race of Sikkim dwell in the valleys approaching the snowy range.

The *Mechi* are the occupants of the Terai or sub-Himalayan range, who retain the manners of the mountaineers. Firing the forest is so easy in the drier months of the year, that a good deal of cultivation is met with on the spurs, at and below 5000 feet, the level most affected by the Lepcha, Limbu, and Sikkim Bhotia. The mountain slopes are so steep that the spurs or little shelves are the only sites for habitations between the very rare flats on the river banks and the mountain ridges, above 6000 feet, beyond which elevation cultivation is rarely if ever carried by the natives of Sikkim. The varieties of grain are different, but as many as eight or ten kinds are grown without irrigation by the Lepcha, and the produce is described as eighty fold. Much of this success is due to the great dampness of the climate; were it not for this, the culture of the grain would probably be abandoned by the Lepcha, who never remain for more than three seasons on one spot. The average rainfall at Naini Tal is 88 inches. Naini Tal is elevated 6500 feet on the last spurs of the Gogar, overhanging the plains of Rohilkhand. Almora is 15 miles farther than Naini Tal from the plains, and it is 5500 feet, but only 34 inches of rainfall. The fall at Darjiling is 165 inches. Oak trees, maple and other mountain trees, throw out great knots in the places to which the *Balanophora* attach themselves. These knots are hollowed out into wooden cups by the Lepcha of Tibet. Some of the Lepcha cups are supposed to be antidotes to poison; they are of a peculiar pale-coloured wood, and cost a great sum, but common cups cost only 4d. or 6d. They are all imported into Tibet from the Himalaya.

Darjiling, on the eastern end of the Himalaya, in lat. 27° N., and long. 88° E., is about 7168 feet above the sea. The tribes in and around Darjiling consist of Amatti, Bahir, Bhotia, Brahman, Chépang, Dhanuk, Dhanwar, Dhimal, Dom, Garo, Kewant, Koch, Lepcha, Limbu, Maralia, Mechi, Murmi, Nepalese, Oraon, Rajput, Sanwar, Tharu.

The *Khu*, the *Magar*, and the *Gurung*, with a markedly Mongolian physiognomy, stature low, 5 feet 3 inches to 5 feet 8 inches; small hands. The *Khu* speak a Parbattia or Sanskritic dialect of Hindi. The *Magar* and *Gurung* have separate dialects of their own, which are not Sanskritic. They are mountaineers, and make good soldiers.

The Bhotia, the Lepcha, and the Murmi have strongly-marked Mongolian features. The Bhotia and Lepcha are fair in colour, with powerful frames, feet and hands well developed, and they are active.

The *Murmi* are smaller in stature than the Bhotia and Lepcha. They speak languages of Tibetan origin.

The Limbu, the Kiranti, the Haiu, the Sanwar,

and the Chepang are mountaineers, of small stature, all of Mongolian type, which is most marked in the Limbu.

The *Michi*, the *Dhimai*, and the *Garo* inhabit the Terai or low lands at the foot of the mountains, and withstand the most deadly malaria. Their physiognomy is Mongolian, with a yellowish skin. They are not of the Hindu, Buddhist, or Muhammadan religions. They are not fond of soldiering.

The *Tharu* and *Dhanur* live in the Terai. They are of a dark colour, are scarcely Mongolian in features, and they are either Buddhist or Muhammadans.

The *Batur*, *Kebrut*, the *Amath*, the *Maraha*, the *Dhanuk*, and the *Dom* live in the Terai, are dark coloured, and not Mongolians. They speak Hindi and Bengali, and follow Hinduism, but are deemed unclean.

The *Koch'h* or *Rajhansi* inhabit the Terai, Nepal, and Sikkim, and spread into the adjacent districts of Purniah, Rangpur, and Assam. They are of a dark colour, and follow Hinduism, but are deemed unclean castes.

Lepcha.—Sikkim and Darjiling is the land of the *Lepcha*, a Bhot race who are hemmed in between the *Nowar* and other Nepal tribes and the *Lhopa* of Bhutan on the east, the *Lepcha* area being barely 60 miles in breadth, but they occupy an extent of about 100 miles from N.W. to S.E. along the southern face of the Himalayas, to the east and west of Darjiling, extending i.e. into Bhutan on the east and into Nepal on the west. *Lepcha* are also called the *Deun-jong-mar*. They are divided into two families, the *Rong* and the *Khamba*, but in physical appearance, in all essentials of language, religion, customs, and habits, they are now so amalgamated that they are to be regarded as the same people. Their traditions are that the *Rong* has always been in Sikkim, but there is no doubt that the *Khamba* came across the snowy range from Tibet into Sikkim in the beginning of the 17th century. Dr. A. Campbell believes that the *Rong* are of the same tribe and from the same locality in Tibet, but had emigrated long prior to the *Khamba*. The *Khamba* say they came from 'Kham', a province of China, which they describe as about 30 days' journey to the east and north of Lhasa, and on the main road from that city to Peking. The *Lepcha* are Buddhists, following the *Lamas* of Tibet and of their own tribe.

The *Lepcha* lama or priest can marry, and many of them engage in business. The *Lepcha* have a written character. The *Lepcha* have no caste distinctions, but they speak of themselves as belonging to one or other of the following sections:—*Burphung Phucho*, *Udding Phucho*, *Thurjokh Phucho*, *Sundyang*, *Sngut*, *Tungyeld*, *Lucksom*, *Therim*, *Songmc*. They are gross feeders, eating all kinds of animal food, pork, beef, goat's flesh, mutton, the monkey, elephant, rhinoceros, the flesh of the cow, birds, and all kinds of grain and vegetables, fern tops, fungi, nettles, and mountain spinach. They are fond of fermented and spirituous liquors, a beer from the *murwa*, but are not given to drunkenness.

The *Lepcha* women perform all the field and house labour. The *Lepcha* man is idle, abhors all craft labour, but recently they have worked as chair-bearers, and in the tea plantations. The *Lepcha* do not marry young. They intermarry

with the *Limbu* and *Bhotia*. The *Lepcha* bury or burn their dead. Their ailments are small-pox, rheumatism, and remittent fever, and goitre is known amongst them.

The *Lepcha* physiognomy is markedly Mongolian, stature short, from 4 feet 5 inches to 5 feet; face broad and flat, nose depressed, eye oblique, chin beardless, skin sallow and olive, with a little moustache on the lips; broad chested and strong armed, but small boned, with small wrists, hands, and feet. The *Lepcha* is honest, timid, and peaceful, with mild and frank features; a dirty, good-natured people, resembling in character the Mongol beyond the Chinese wall. The *Lepcha* throws over him loosely a cotton cloak with blue, white, and red stripes, and uses an overcoat with sleeves in the cold weather; a broad umbrella-shaped hat of leaves and a pent-house of leaves in the rains. The women dress in silk skirt and petticoat, with a sleeveless woollen cloak. The *Lepcha* man carries a long, heavy, and straight sword, serving for all purposes to which a knife or sword can be applied. They drink the fermented juice of the *Elaeagnus coracana*, *murwa*, an acidulous, refreshing, and slightly intoxicating drink, not unlike hock or sauterne in its flavour. They marry before maturity, the brides being purchased by money or service. The *Lepcha*, like the Borneo Dyak, kindle a fire by the friction of sticks.

The face is round, and the expression is remarkably lively and soft, which is the reverse of that of the *Lhopa* and West Tibetans, and their lively and inquisitive character does not belie it. The men have less muscular development than the *Magar*, *Gurung*, and *Murmi*, and other *Parbattiahs*. They are fair, ruddy, and with Mongolian features, and have no beard. The women are proportionally short. They are poor agriculturists, and move from place to place, staying two or three years. The sword worn by every *Lepcha* is called *Ban*. It is the *Chipsa* of the *Bhotia*, a straight sword with a wooden scabbard, open along the side.

The *Limbu* is a border race in Sikkim and Nepal, but the *Kirata*, *Kiranti*, or *Kichak* as well as the *Eaka* and *Rai* are often included under this name; and Dr. Campbell informs us that in appearance they are very much alike. *Limbu* has therefore become the common appellation of the whole population of the mountainous country bordering between the *Dud Kosi* and *Konki* rivers in Nepal, and they are also in small numbers eastwards to the *Mechi* river, which forms the coterminus of Nepal and Sikkim. The name is a dialectal variation from *Ekthumba*. The *Lepcha* call them *Tsang*, in the belief that their original country was *Tsang*. The *Limbu*, *Sanwar*, and *Chepang* possess a small Mongolian type, strongest in the *Limbu*. The *Limbu* resemble the *Rong*, but are a little taller and more muscular, with the eye rather smaller; the nose also is somewhat smaller, with a somewhat high bridge. They are a hardy, hard-working race, engage in the cultivation of grain, and breed cattle, pigs, and poultry. They drink to excess. Their huts are made of split bamboo, and the roofs of leaves of the wild ginger and cardamom, guyed down with rattans. They have martial proclivities, and occasionally enlisted in the native army of British India. According to Dr. Campbell, the *Limbu* is

more pleasing to the ear than the Lepcha, being lahal and palatal. If they ever had a written character it has been lost. They are partly Brahmanical and partly Buddhist; their great deity is called Shammung, but they have many minor deities. As a Limbu expires, the friends fire off a gun to give intimation to the gods; the body is burned, but they do not sacrifice or make offerings to the manca.

CEYLON ISLAND has an area of 24,702 square miles, and in 1881 a population of 2,759,738, of whom 1,469,553 were males and 1,290,185 females. It is under the rule of a Governor and Council, whose jurisdiction extends to Dependent Islands, with an area of 1060 square miles, comprising the Maldives, west of Ceylon, and the Cocos Islands, S.W. of Sumatra,—total area, 25,762 square miles. The population in 1844 was estimated at 1,442,062; in 1857 it amounted to 1,697,975, besides about 30,000 soldiers and foreigners. In 1871 the total population in the island was 2,406,262.

The mountain zone in the centre of the island is about 4000 square miles, its summits rising to between 3000 to 7000 feet, the highest mountain being Pidurutalalla galla, 8296 feet; Adam's Peak being 7353 feet; Neueraellia, 6200. The Mahaveli-ganga, the Ganga of Ptolemy's map, has a course of 150 miles to its embouchure at Trincomalee. The rich and well-watered delta between Colombo and Galle is an overgrown waste. The Singhalese, whose property it is, have covered it with coconut, bread-fruit, and jack-fruit trees, and on those they are content to live, or rather exist, passing the greater part of their time in sleep, while the women of their household work.

The races in 1881—

European,	4,836	Moormen,	184,542
Eurasians, Burghers, . . .	17,886	Malays,	8,895
Singhalese,	1,846,614	Veddahs,	2,228
Tamils,	687,248	Others,	7,489

Arranged according to religion—

	Males.	Females.
Christians,	139,058	128,319
Buddhists,	888,357	809,713
Hindus,	328,779	264,851
Muhammadans,	111,339	86,436
Others,	1,420	866

Ceylon island has long been known to the people of the west, to Arabians, Africans, Jews, and Greeks. It is the Taprobane of the Greeks, which name appears to have been derived from Tamraparni (in Pali Tambapanni), a place said to have been near Putlam, where the Magadha colonists under Vijaya, B.C. 543, had landed, and afterwards it applied to the whole island. Tamraparni is also, however, the name of the principal river in Tinnevely, opposite Ceylon. Milton writes of this people—

'From India and the Golden Chersonese
And utmost Indian isle Taprobane,
Dusk faces with white silken turbans wreathed.'

It has been several times overrun by conquering nations, and has also been aggressive. It was conquered by Vijaya B.C. 543; but in the early centuries of the Christian era there were wars with the Chola of the Peninsula, with alternate fortunes, and in the 12th century A.D. king Prakraina Bahu defeated the kings of the Southern India States, and also conquered Cambodia. In the 15th century A.D. a Chinese army penetrated to the hill country, defeated the Singhalese

forces, and captured the king, whom they carried to China. Its northern portion was twice captured by the Tamil race; and in A.D. 1505, when the Portuguese arrived, it was divided under seven separate rulers. In 1656 the Dutch finally expelled the Portuguese, and the British landed in Ceylon in 1796. In 1815 the last king of Kandy, Vikrama Sinha, a cruel monster, was deposed and banished to India by the British.

The Singhalese are comparatively few in the north of the island, in Jaffna, Vanni, and Manaar, but increase to the south, where they are 90 per cent. of the population. On the other hand, the Tamil race are most numerous in the northern districts.—Jaffna 271,000, Eastern Province 69,243; on coffee estates 115,092, and scattered through the island 78,314. The Singhalese are 69.40 per cent., and the Tamil 22.21 per cent.

Kandyans inhabit the hill country, and are a hardy, robust race, only recently intermingling with the low country. Their language is made up of three component parts,—Elu (or Singhalese pure), the Pali, and the Sanskrit. They possess an extensive literature, and their religion is Buddhism. The low country Singhalese are either Buddhists, Roman Catholics, or Protestants.

Among the Kandyans polyandry was prevalent till 1861, and the wife had the possession of all the brothers. The children call the eldest brother father. A man could bring in another, not a relation, to have joint marital rights with himself; indeed, the first husband could so introduce as many as the wife consented to receive as husbands. According to Polybius, polyandry was practised in ancient Greece, and in Book xii. we read that it was an old and habitual practice in Sparta. In Kandy, in the Beena marriage, the husband resided in the wife's house, and the woman shared the family inheritance with her brothers. The husband, in this marriage, could be dismissed summarily by the family of the wife. In the Diga marriage, the wife left her own house for that of the husband,—forfeited all claim on the property of her parents, but acquired some claim on that of her husband, and the wife could not obtain divorce, unless with the full consent of the husband. Divorces were constantly sought for by women on trivial pretences. A child born within nine months of the divorce, must be maintained by the husband. The Kandyans are larger men than the Singhalese of the coast provinces. They are exceedingly indolent and thriftless.

Tamil people have been residing in Ceylon from unknown times, but many are recent immigrants. Their main occupation is agricultural. The (coolie) labourers, who come over in large numbers from the continent during the coffee season, are Tamilar.

Tenuent describes the Veddah as miserable objects, active but timid, athletic though deformed, with large heads and misshapen limbs. Their long black hair and beards fall down to the middle in uncombed lumps; they stood before him with their faces bent towards the ground, and their restless eyes twinkled upwards with an expression of uneasiness and apprehension. The children were entirely naked, with misshapen joints, huge heads, and protuberant stomachs; the women were the most repulsive specimens of humanity he had ever seen in any country.

The forest Veddah dwell in hollow trees or caves,

subsist on game, which they kill with rudely-formed bows and arrows, wandering from jungle to jungle, as the game becomes scarce. They will not hold the slightest intercourse with any natives but those of their own tribe. The village Veddah dwell in certain districts, hold but slight intercourse with the other inhabitants of the island, will not intermarry nor mix with them, but can make themselves understood to the Singhalese.

The forest Veddah are dexterous hunters, and especially skilful in snaring the wild elephants. The two sections of the tribe do not intermarry, as they mutually distrust each other. They have their own headmen, whom they elect and obey. They use bows and arrows, and clubs of iron and wood. In 1871 their number was reduced to 534, of whom 459 were in the Central Province. They occupy a district about 90 miles long and 45 broad in the south-eastern side of Ceylon, lying between the sea and the base of the Badulla and Oovah Hills. According to Mr. Sirr, they are a remnant of the Yakkos, the original inhabitants of Ceylon, who, 2000 years ago, after the conquest of the island by Vijaya and his followers, returned into the wilds, as the Koli in Gujerat, the Bhil in Malwa, the Patuah in Cuttack, the Khond in Gondwana, and the Beda in Mysore retired before conquerors. The Bisada or Besada, which in mediæval Greek is called Vesada, are alluded to in the tract of Palladius de Moribus Brachmanorum, written about A.D. 400; and the same name is applied by Ptolemy to a similar race inhabiting Northern India. The Veddah, in drawing the bow, employ their hands and their feet. They are omnivorous, and eat carrion and vermin, roots, grain, monkeys, fruit, birds, bats, crows, owls, and kites, but refuse the bear, elephant, and buffalo. Their language is a dialect of Singhalese, free from Sanskrit or Pali, but the vocabulary is very limited, and they have recourse to gestures and signs. They have no temples, idols, altars, prayers, or charms, but have a devil and spirit worship. They cover their dead with leaves in the jungle.

Rhodia, according to one tradition, were hunters who, on the eve of a solemn occasion, failing to obtain game, etc., murdered a child and sent its dismembered body to the king; another and more probable tradition is to the effect that this caste persisted in eating beef after its use as food had been prohibited. Their own traditions make them descendants from a daughter of King Pera-kumba, who in anger with his daughter gave her to a scavenger. They are mentioned in the Rajavali, written B.C. 204, and in ch. xlii. of Mahawanso, A.D. 589. The tenth chapter of the Mahawanso mentions that, B.C. 437, the king Pandukabhaya employed them in Anuradhapura as scavengers. The native laws forbade a Rhodia to approach a temple of Buddha or the Hindu gods; to build houses, or to live in any abode enclosed within walls, nor even to cultivate the soil or possess land; and, even to this day, their dwellings are mere sheds. They were forbidden to approach, much less to touch or breathe upon, a caste man, and all things they touch are unclean. The men wander about in parties or tribes seeking their precarious subsistence. Their women perform feats of legerdemain, and tell fortunes, and their want of chastity is proverbial.

Their numbers do not exceed a thousand, and they are principally in the Kandyan province, at Saffragam, Dombera, Wallepana, etc. Nominally Buddhists, they are also spirit-worshippers. Rhodia, Rodeya, or Rodda, in Singhalese, literally means filth. In their social degradation they resemble the Cagot and Caqueax, who from time immemorial have been held in abhorrence in the valleys of the Pyrenees and the plains of Bretagne, Poitou, and Guienne.

The Rhodia is of tall stature, head well formed, features straight and regular, nose long and not flattened, lips thin, and appearance intelligent. The features and head of an average Rhodia and Kinnaraya are nearly identical with those of the European races. The Rhodia's head is dolichocephalic. They are Buddhists and devil-worshippers, but are not admitted inside the temples. They are polygamists and polyandrists. They are all uneducated, and cannot count above 50. Their language, containing about 350 words, is peculiar. They bury their dead.

Gahalaya are a low-caste predatory race, near Matelle in Ceylon, who acted as executioners in the times of the Kandyan kings.

Gattaroo, a low caste race in Ceylon.

Moorman is the designation in Ceylon for all persons professing the Muhammadan faith, other than Malays and Arabs. The costume of the men is a long petticoat, fastened round the waist and reaching to the heels. Tortoise-shell combs are worn by men as well as women. In the numerous excesses into which European costume is carried, the size of the back comb worn by ladies has never attained that of the Singhalese men, who also wear a narrow long bent comb across the forepart of the head; the lighter-coloured shell is most esteemed by them. Five pounds is a moderate price for a tortoise-shell back comb, which increases in value according to the size and quality of the shell. Hair-pins of tortoise-shell are worn by the women, gold and silver being substituted for full dress. These hair-pins are among the articles purchased by passengers in the steamboats.

The European population consists chiefly of British immigrants employed in the civil and military services or on the coffee and tea plantations. *Burgher* is a term properly applicable only to white persons of pure Dutch descent, of whom there are now but very few in Ceylon; but the name has, by courtesy, been given to all those who in India are styled Indo-Britons, Eurasians, Anglo-Indians, East Indians, or, now rarely, half-castes, namely, the descendants of Europeans by native women, therefore a race of mixed European and native origin. In 1871 they numbered only 5771.

The Singhalese or Elu language, according to Rask, belongs to the Turanian family of speech, but Aryan and Dravidian elements are intermixed, and in Ceylon a remnant of Buddhists is still to be found who use the Pali scriptures.

Maldivé Islands, Zabiya-ul-Mohli, form a vast group, estimated at twelve hundred, extending southward from lat. 7° 6' N. to 0° 42' S. These multitudinous islands and rocks have about 470 miles in length from N. to S., and 70 miles in breadth, the islands being formed into large groups which the natives call atoll or atollon. Sir Charles Lyell says the word is Malay. Of these atolls there are nineteen, and they appear to be the

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summits of coral-mountains. The inhabitants are Muhammadans, governed by a sultan or king, and engaged in trade and navigation. Their ships are from 50 to 200 tons, and they visit Penang, the continent of India, and Arabia. They became Muhammadans in the 16th century, but their wives are not strictly secluded. They are a timid, inoffensive people, using a language different from those of the mainland or Ceylon, and they possess three written characters,—the Dewihi and Hakura, written from left to right, and the Arabic, written from right to left. The men are rather short, of a dark-copper colour. They are expert navigators and sailors, have schools for teaching navigation, make and repair nautical instruments, such as the astrolabe and quadrant, and translate into their own language from the English books, the rules of navigation.

The Laccadive Islands are so called from two Hindi words, *Laksha dwipa*, hundred islands. They are also called the *Divi* or *Amin divi* islands, are off the coast of Malabar, and extend from lat. 8° 30' N. to the parallel of 13° 52' N. Most of the islands are low and surrounded by steep coral reefs. They form a group of fourteen small islands, partly under the British and partly under the *Bibi of Cannanore*. The people are of Malayala origin, but are now Muhammadans, and mostly adhere to the *Aliya Santana* law of inheritance, or that of maternal descent. They are poor, quiet, and inoffensive. They are taught Arabic and *Bal-tito*, a dialect of Malayalam. They carry on a small trade with all the coast of Western India, which they visit in boats up to fifteen tons burden, carrying tortoise-shell, sea-slugs, mats, shells, shark-fins, coconuts, and coir.

Five islands, *Amini*, *Kadamat*, *Kiltan*, *Chetlat*, and *Bitra*, with a total area of 6½ or 7 square miles, are attached to the South Canara district; and other five, *Agathi*, *Kowrathy*, *Kalpeni*, *Androt*, and *Minkeoi*, with an area of 7½ to 8 square miles, are under the *Bibi of Cannanore*. All the islands have lagoons. The population numbered, in 1871, 13,495; a few read the Koran in Arabic. According to Lassen, the language of the Laccadives and Maldives belongs to the Turanian family. It is Malayalam written in the Arabic character. They catch fish, turtle, and the holothuria. Grave crime is almost unknown. Rats swarm on the islands, and a revenue officer introduced the mungoos, species of *Herpestes*, and large owls to keep them down, as the rats were destroying the grain crops on the ground and the coconuts on the trees. In 1871 the islands were flooded during a storm, and a steamer laden with rice was sent to them, and in 1875 an hospital assistant and midwife were sent.

Andaman Islands have an area of 880·2 square miles, and a population in 1881 of 14,628, of whom 7440 were convicts on the penal settlement. The Andaman Islands lie in the direct track of ships navigating the eastern side of the Bay of Bengal, and have been twice actually occupied by a British establishment. Their inhabitants, the *Mincopi*, had the feeling of hostility and aversion towards strangers which is common to all the wilder Papuan tribes. They long continued to be bitterly hostile to the colony of 1855. They are savages of a type lower than that of any of all the other races in the south and east of Asia, or even of the whole world. Few of them exceed five feet

in height. Their lower limbs are spare and ill-proportioned, their bellies protuberant, the complexion deep black, and the hair woolly. They have also a taste, so characteristic of the wilder Papuans, for daubing their heads with red ochre. They have canoes, but use small rafts when they wish to visit the islets. Both sexes go entirely naked, for the pieces of fringe that they wear about them are rather intended for ornament than as a covering. They obtain fish by descending to the shore at low water and spearing those that are left among the reefs by the receding tide, also shooting them with bows and arrows, and catching them with small hand-nets, and depositing them in long wicker baskets which they carry slung from their shoulders. All these are characteristics of the wilder coast Papuans, especially those who formerly occupied Tasmania, to whom, indeed, the *Mincopi* bear a resemblance so striking as to excite surprise that two tribes who must have been separated during many ages, and who reside in climates so different, should be distinguished by precisely the same characteristics. The only point of difference that can be detected consists in the knowledge on the part of the Andamans of the use of the bow and arrow, which was either never known to the *Van Diemen's Land* natives, or had been neglected in favour of the dart or throwing spear, which is far better adapted to the open nature of their country.

A large number of *Mincopi* who visited Ross Island during the Editor's stay in 1863 evinced great facility in imitating vocal sounds. They (*Mincopi*) roam in tribes, who speak different dialects unintelligible to each other; one of their dialects has been called *Bojingijida*. The tribes are at enmity with each other. The inhabitants of the Southern Andaman erect no houses, those of the Little Andaman erect beehive huts of the rudest character. Their marriage ceremony is extremely short and simple; their dead are interred immediately after death, or placed on a raised platform, and the site where the death occurred is abandoned. After two months, the bones of the deceased are cleaned and distributed, to be suspended round the neck, seemingly as charms. Women have sometimes a slight cincture of leaves, a bunch of which is suspended from the waist-belt behind. There are kitchen middens, some of great dimensions, one being 300 yards long, 50 yards broad, and 10 feet high, composed of shells and the bones of birds. The zoology is identical with that of Burma.

The Malay Peninsula is also known as the Eastern Peninsula, to distinguish it from the Western Peninsula of India. It is a long, narrow, mountainous tract, varying in breadth from 50 to 150 miles, and about 700 miles in length, on the east from Bangkok at the head of the Gulf of Siam, in lat. 13° 58' 30" N., and long. 100° 34' E., and on the west from the Tavoy river to Cape Ramunia, in lat. 1° 22' 30" N. The mountains of the interior rise 5000 and 6000 feet in height above the sea, one of them, *Ladang*, which the Portuguese named *Mount Ophir*, being 5600 feet high. The metallic ores obtainable are gold and tin, the latter in great abundance, and it is probably from the gold obtainable that the Peninsula has been supposed to be the *Aurea Chersonesus*. Newbold says (i. p. 481) that the

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gold obtained from the Malay Peninsula amounted in one year to 19,800 ounces.

The Portuguese and the Dutch have at times held possessions there, but the former were driven out by the latter nation, who ceded all to Great Britain by the treaty of London of 17th March 1824, Britain undertaking not to hold any of the islands south of Singapore. The dominant powers at present are the British on the west and south, and the Siamese on the east and south.

Kalantan, Quedah, Tringanu, Perak, Kemaman, Jellabu, Sunjie Ujong, Jompole, Srimananti, Rumbowe, Johole, Nanning, Sejamet, and Johore are native states, over which Siam claims supremacy, and the British territory comprises the southern part of Tavoy, Mergui, Province Wellesley, and Malacca, with the islands of Singapore, Penang, the Andamans, the Nicobars, and the Mergui Archipelago. Lieut. Newbold furnished an estimate of their populations in 1839:—

Exterior—	Interior—
Quedah and Ligore, 50,000	Rumbowe, . . . 9,000
Perak, . . . 35,000	Sunjie Ujong, . . . 3,600
Salangor and . . . 12,000	Johole, . . . 3,080
Kalang, . . . 25,000	Jompole, . . . 2,000
Johore with Sejamet . . . 40,000	Jellabu, . . . 2,000
and Muar, . . . 25,000	Srimananti, . . . 8,000
Pahang, . . . 40,000	Aborigines scattered over the Peninsula, . . . 9,000
Kemaman, . . . 1,000	British—
Kalantan, . . . 50,000	Malacca and Penang (1836), . . . 37,706
Tringanu, . . . 30,000	Pro. Wellesley (1835), 46,840
Patani, . . . 10,000	

It was estimated that Quedah had 100,000 souls and Patani 90,000 before the Siamese invasion, when they were reduced to one-eighth of their former numbers.

The more southern states are Malay, interspersed with small colonies of Chinese, mostly men, and of Chulia and Kling emigrants from the Peninsula of India. There are four British districts styled the Straits Settlements. These were occupied in the early part of the 19th century, and attracted numbers of Chinese, Malay, and Kling. A census taken in 1881 shows their population as under:—

	Singapore.		Penang and Pro. Wellesley.		Malacca.	
	M.	F.	M.	F.	M.	F.
Arabs, . . .	274	191	179	175	152	151
Boyanoese, . . .	1,377	257	7	...	118	17
Bugis, . . .	1,014	978	6	8	47	38
Chinese, . . .	46,631	7,467	30,168	6,214	9,850	3,606
Javanese, . . .	2,155	1,084	804	283	246	93
Jaweepehan, . . .			1,718	1,773		
Kling, . . .	7,664	1,633	5,136	1,687	1,556	1,318
Malay, . . .	10,041	9,209	35,501	34,963	28,102	29,372
Siamese, . . .	25	19	266	183	3	3

Two distinct races are in that peninsula and its adjacent islands, the Mongoloid, Mon, Siamese, and Malay, with the Negroid, Mincopi, and Semang. The tribes of the Mongoloid race are numerous, but are in places so few in numbers that a hut or two form a nation. They are of little political or ethnical importance. In the states bordering on Siam, the bulk of the population consists of the Malay, Siamese, and Samsam, the latter being Siamese converts to Muhammadanism, who have adopted the language, the habits, and manners of the Malays.

All but the Malays are engaged in mercantile, artisan, or agricultural avocations, making a little money and returning to their native countries. This is evident from the disproportion of the

sexes. The Malays have 73,644 men and 73,544 women; but the Chinese men are 86,649, with only 17,287 women; and the Kling 14,356 men and 46,38 women.

Quedah, between lat. 5° and 6° 50' N., and its several islands are occupied by the Malay, Siamese, Samsam, and Semang. In the *Salangor* State, from lat. 3° 50' N., the mass of the population is Malay, but the ruling race are Bugis from the Celebes. This small state, up to the earlier part of the 19th century, was more addicted to piracy than any other of those in the Peninsula.

Tringanu, a maritime state on the east coast, is peopled by Malays. *Patani* has Malays and Siamese.

The four inland states of Rumbowe, Sunjie Ujong, Johole, and Srimananti, as also the province of Nanning (4000 square miles), are peopled by the descendants of a Malay colony direct from the ancient empire of Menangkabau in Sumatra.

The *Johore Archipelago* embraces several hundreds of islets, and the considerable islands of Battam, Bintang, Krimun, Gampang, Gallat, and Sinkep, in the line of the plutonic zone of elevation of the Malay Peninsula from Singapore to Billiton. Banka and Billiton may also be included in it; they are so geologically and ethnologically, though not geographically. The more important of the tribes in this Archipelago are those termed collectively *Orang Pe-Sukuan*, literally the people divided into tribes. They are all vassals of the king of Johore. The tribes of highest rank are the *Orang Bentan* under an *Ulubalang*, the *Orang Singgira* under a *Batin*, the *Orang Kopet* under a *Jumang*, the *Orang Bulo*, and the *Orang Lingga*. There are other tribes of the creeks and the sea, and some in the interior of the larger islands are wild.

Johore, formerly the chief city of the empire of that name, and residence of the sultan, is situated about 20 miles up the river so called. The town was founded in A.D. 1511 or 1512 by Sultan Muhammad Shah II. of Malacca, who, after his expulsion from that place by the Portuguese, fled to the river of Johore. From that time the town of Johore has been the capital of the empire, which took the name of the empire of Johore instead of that of Malacca. It is in the extreme southern part of the Peninsula, with numerous islands. Johore is the residence of a *Panghulu*, who is appointed both by the sultan of Johore and by the *Tumungong* of Singapore. It is now the generally received opinion that Johore derived its population from Menangkabau. The *Johore Archipelago* was probably inhabited from a very remote period, anterior even to the existence of any race in Sumatra, by a maritime branch of the same people, radically Malayan, who are now found in the interior of the Peninsula and of the southern half of Sumatra. Several tribes in various stages of civilisation still possess the *Johore Islands*. Though little known to Europeans, they can never have been without Malay or Indo-Malay visitors, for it was by the great rivers of Palembang, Jambi, Indragiri, and Kampar, before whose embouchures these islands lie, that the natives of Ceylon and Southern India must have gradually carried civilisation into the interior of Southern Sumatra.

Kalang, Jellabu, Ulu Pahang, Jellaye, and Srimananti are also Malay, subject to Johore.

The smaller tribes of the interior and of the sea-coast have their own names, but are known generally by Malay designations, of local signification, with the word *Orang* prefixed,—*Orang Binua*, men of the soil; *Orang Bukit*, men of the hills; *Orang-Utan*, men of the woods; *Orang Sitar*, men of the strait; *Orang Laut*, men of the sea. Occasionally the Arabic word *Rayat*, or subject, is used, as *Rayat Utan*, *Rayat Laut*.

Also, among the forests and mountains of the interior are several barbarous tribes, who subsist chiefly by hunting and by shooting game, using the blowpipe and poisoned arrows. Amongst them are the *Semang*, the *Sakai*, or *Orang Bukit*, men of the hills; the *Jakun*, or *Orang-Utan*, or *Rayat Utan*, men of the woods. The wild tribes are chiefly in the mountain chain running down the centre of the Peninsula from *Quedah* to *Point Ramunia*. The *Rayat Utan*, the *Jakun*, the *Sakai*, the *Hala*, the *Belanda*, and *Besaisik*, are in the forests in the south.

Pahang territory extends from *Sadile*, in lat. 2° 15' N., to *Kamamang* or *Kemaman*. The population of *Kemaman* consists of Malays and Chinese; but in the interior of *Pakaa*, between *Kemaman* and *Tringanu*, is an aboriginal race termed *Pangan*, said to have the frizzled hair of the *Papuan*.

Orang Binua, literally men of the soil, is a name applied by the Malays indiscriminately to all the uncivilised scattered tribes,—*Semang*, *Bela*, *Jakun*, *Hala*, and *Udai*. In the States of *Sunjie Ujong* and *Johore* there are twelve such tribes, besides the *Besaisik* and the *Belanda*, and others in *Salangor*. The *Binua* have been supposed by some to be of Negro origin, but others regard them as Mongoloid races.

Newbold says it is stated by the *Binua*, and admitted by the Malays, that before the Malay Peninsula had the name of *Malacca*, it was inhabited by the *Orang Binua*. In course of time, the early Arab trading vessels brought over priests from Arabia, who made a number of converts to Islam; those of the *Orang Binua* who declined to abjure the customs of their forefathers, in consequence of the persecutions to which they were exposed, fled to the fastnesses of the interior, where they have since continued in a savage state. He says their general physical appearance, their lineaments, their nomadic habits, and a few similarities in customs, point to a Tartar extraction.

In the *Binua*, the cheek-bones are broad in all directions and prominent, giving to the face below the base of the forehead a marked lateral development, beyond it or to the forehead an appearance of being compressed. The lower jaw is massive, spreads out, and does not rise rapidly, thus producing an obtuse chin and the anterior maxillary projection considerable.

The ruder *Binua* dialects of the Peninsula are rapidly disappearing. There are *Binua* on the *Simrong* and other branches of the *Indau*, which are in *Johore*. The southern part of *Pahang* is inhabited by the same tribe of *Binua* who are found in *Johore*. Some of them, indeed, have habitations, which can scarcely be called houses.

The *Jakun* are scattered through the interior, and are often called *Rayat Utan*. They do not differ materially from the Malay in colour and physiognomy.

The *Bodoanda Jakun* and *Bodoanda Jawa* are

two tribes in the *Rumbowe State*. In *Rumbowe Ilir* are the *Battu Ampar*, *Munkal*, *Paya Kumba Barrat*, and *Tiga Nenik* tribes, and in *Rumbowe Ulu* are the *Battu Ballang*, the *Paya Kumba Darrat*, the *Sa Melongang*, and the *Sri Lummah*; also the *Tiga Battu*, *Anak Malacca*, *Anak Achi* (children of *Malacca* and *Achi*), and *Tannah Dattar*.

The *Jakun* are proud, impatient of control, but honest, fond of music. Both men and women, in their forests, have only a strip of the tarap tree for covering. The features of the *Jakun* or *Sakai*, the *Belanda*, the *Besaisik*, and the *Akkye* bear a common resemblance to the pure Malays: they have the same sturdy legs and breadth of chest, the small depressed, though not flattened nose, with diverging nostrils, and broad, prominent cheek-bones, which distinguish that race of men.

Udai are little known. Many Malays believe they are a class of *Jakuns*, while others affirm that they are a colony from some foreign country. The *Tuanku Puteh* of *Rumbowe* informed *Newbold* that the *Udai* are a race of savages, thinly scattered over the states of *Jellabu*, *Pahang*, *Tringanu*, and *Quedah*, and resemble in feature the darker variety of *Jakuna*. Their size is represented as smaller, and their habits more savage, going nearly naked, dirty in person, rarely constructing huts, and subsisting on forest products, using the sumpitan and poisoned arrows, and sharp stakes as spears.

The *Semang* and the *Udai* dwell in the forests in the north, and are met with in *Quedah*, *Perak*, *Tringanu*, and *Salangor*. To the north of the province of *Ligore*, the *Semang* seem to be called *Karian*. Malays class the *Semang* as the *Semang Paya*, *Semang Bukit*, *Semang Bakowe*, and *Semang Bila*, meaning the *Semang* of the marsh, of the hills, of the coast, and the civilised. Sir *Stamford Raffles* and Mr. *Anderson* described the *Semang* as having a black skin, woolly hair, thick lips, flat nose, receding forehead, and protuberant belly; and subsequent authorities regard them as of the *Papuan* race. *Newbold* (ii. p. 378) says that those around *Quedah* are scarcely to be distinguished from the *Jakun*, having the same curly and matted, though not frizzled hair, but with a complexion generally a little darker. They use poisoned arrows with the blowpipe sumpitan. They are said to write on the leaves of the 'stebbal.' Many have been converted to *Muhammadanism*. They will be further noticed along with the *Papuans*.

The *Orang Sabimba* is a small tribe of forest nomades who hunt the wild hog with dogs, and use the sumpitan blowpipe as their weapon. Rice is their chief food, but they eat the hog, monkey, snakes, birds of all kinds, except the domestic fowl. They abstain from agriculture. They bury their dead, depositing all the deceased's utensils along with the body. They speak the Malay language, but with a peculiar accent.

The *Mintira* believe that all diseases are caused by spirits, each ailment having its own spirit, who haunts in caves, in woods. They have wishing rocks to which they resort to gather the *Chinkwi* flower, which gives them supernatural power over others. Amongst their marriage ceremonies is that of the bride and bridegroom eating from the same plate. The *Mintira*, and all the tribes

of the interior, have a dread of the sea, and never venture on it.

The Chinese scattered over the principal islands of the Archipelago were estimated in 1839 at nearly a million in Siam, Tonquin, Cochin-China, Kamboja, Laos, and the Malay Peninsula. In the year 1871, in the British Settlements in the Straits, there were 103,936. Facilities for travel have allured a great influx of that intelligent race, who are largely engaged in mining operations, in garden cultivation.

The *Orang* (Slitar) *Selat*, literally people of the straits, the Cellates of Valentyn, are a wild tribe, living in boats near the old Straits of Singapore, using small boats 20 feet long. With the Bidu-nda, they are joint occupants of Singapore. They speak a Malay dialect with a guttural accent. They gather shell-fish; they fish and collect forest produce. They are liable to a leprous affection of the skin. They are supposed to be uncivilised Malays.

The *Sakai* is a pagan population in the Malay Peninsula, divided into the *Sakai Jina* and *Sakai Bukit*, the latter being hillmen and mountaineers, the former more settled and civilised. They are strict worshippers of the elements. *Sakai* is the Pahang word for an aboriginal.

The *Halai*, a branch of the *Sakai*, tattoo their face and breast, pierce their ears and nose, and insert porcupine quills. The *Sakai* tongue of Perak appears to resemble in its phonetic character the ruder dialects of the Burman group. This character is intermediate between that of the Semang on the one side, and that of the ruder Sumatran, Javan, and Borneon on the other. The *Johore Binua* is more guttural, aspirate, and harsh, remarkably broad and slow.

Rayat Laut and *Orang Laut* literally mean seafaring people. The Malays distinguish them from the localities they occupy, as the *Orang Rawang*, the *Orang Selat* or *Orang Slitar*. Their principal haunts are Galang, Selat, Muru, Baru, Kalang, Timiang, Lingga, Tambusa, Sooghi, Mantang, Akik, Murabu, and Ratas. They resemble the Jakun and Malay in appearance, but are of darker colour, and more savage and uncouth in aspect. They are proud and restless, impatient of control, and fond of music. They live in their boats, in which they make long voyages. They are expert divers and fishers, and collect agar-agar, trepang, wood, oil, etc. The *Akkye* or *Rayat Laut*, of the shores and islets, dwell apart from the Malay, from whom they differ in habits and religion. They are thinly scattered, living upon fish, and are probably identical with the *Ichthyophagi* mentioned by Herodotus, Diodorus, and Pliny.

The *Selong* or *Selone* sail all through the islands of the Mergui Archipelago, south of Tavoy. They are a mild, honest, intelligent, and peaceful race, timid, reserved, and difficult to approach. They number about 1000. They reside in their boats, which are good; are decently clad, and are inclined to settle in villages and cultivate. They are fishers for the sea-slug, which they pick up at the low water of spring tides during the N.E. monsoon. They bring to the ports of Tenasserim and of the Malay Peninsula, tortoise-shell, the larger shells of the triton and nautilus, valuable for their mother-of-pearl; the gigantic tridacna, and pearls found in a species of *meleagrina* in

the deep bays of the Lampee Island; also beche-de-mer, sharks' fins, dried fish, and edible birds' nests. They believe that Nat or spirits dwell in the land, the sea, the air, and the forest, but they do not invoke or sacrifice to them. They subsist entirely on fish, turtle, and shell-fish.

Perak, on the west coast, south of Quedah, is 75 miles long. It is tributary to Siam. Its inhabitants consist of the Malays; also the Batta, Barak, Rawa, Mandeling, and Korinchi people of Sumatra; the Bugis and wild tribes in the interior, with settlers from Europe and China. The Bugis are much respected. They at one time overran Quedah, but are now of little importance. The *Korinchi* are strict Muhammadans, dress always in white. They have the Malay manners and language, but use a writing character of their own. The Rawa and Mandeling people are labourers.

The *Orang Binua*, literally men of the country, are called *Sakai* by the Malays of Perak, also *Orang Bukit* or hillmen, or *Orang Laut* or sea men, or *Jakun*, *Besisik*, from the localities or rivers they occupy. The *Sakai* or *Jakun* of Perak are smaller in size than the Malay. The Semang of Perak are of the same size as the Malay, in complexion of a dark-brown more than black, with flat nose, thick lips, large mouth, and hair not lank and black like the Malay, nor woolly like the Ethiopian Negro, but long and in tufts. The Perak population has been estimated at 30,000 to 80,000, and its wild tribes at 5000 or 6000.

Salangor runs for 120 miles south of Perak, from lat. 3° 50' N. The mass of the population is Malay, but the government was held by Bugis from Celebes. In the early part of the 19th century, it was more addicted to piracy than any other of the states of the Malay Peninsula.

Until the earlier part of the 19th century, the Malays on the E. and W. coasts of the Peninsula were largely piratical.

Rhio-Lingga is the name given to two groups of islands, the *Rhio* and *Lingga*, forming the Archipelago of innumerable islands and reefs stretching between Sumatra and Borneo, and which, till 1824, were a part of the formerly powerful kingdom of Lingga, which extended over a great part of the Malay Peninsula, and over the maritime provinces on the east coast of Sumatra from Palembang to the territory of Siak. The *Rhio* group includes Bintang, Batam, Gallat, Bulan, Chumbol, Sugel, Durian (Dryon), Karimon, and Segupong; that of *Lingga* including Lingga, Sinkep, Timian and Roding, Saga and the Seven Islands. On the cession from the Netherlands to the British Government of the Dutch possessions on the Malay Peninsula, *Rhio* (pronounced *Ree-ow*) became of some importance.

ANNAM, COCHIN-CHINA, KAMBOGIA, LAOS, SIAM.—Around the borders of British India, in the N.W., the N.E., S.E., and E., is an ethnical group, which contains the Tibetans, the Nepal tribes, several nationalities of the sub-Himalayan range, the Burmese, the Siamese, the natives of Pegu, the Kambojians, the Cochin-Chinese, and the Chinese, in populations which cover perhaps one-fifth of Asia. They have a general similarity, they are somewhat fair in complexion, with what are called Mongolian features. There are Christians, Muhammadans, and shamanists among their religious sects, but the Buddhist, Confucian, and Taoist philosophies are used as

religions, and almost all believe in the transmigration of souls towards a final absorption. The first migrants from the northern side of the Himalaya, now represented by the Annam, Kambogian, Mon, and Laos tribes, appear to have been at a later period gradually pressed to the eastward and southward by the Tibeto-Burman tribes.

The *Mon-Annam* or East Himalaic tribes occupy the territory bounded on the north by the left side of the valley of the Brahmaputra as far as the head of Assam, and a line drawn thence eastwards along the range in which the Irawadi has its sources, and across the converging meridional chains, beyond to the most eastern, the Mangli, which separates the Kiang from the Mei-kong.

On the south-east of Assam are numerous tribes, many of them subject to the Burmese. These belong to the Siamese or Thai group, and are composed of the Siamese proper, the Khamti, the Laos, and the Shan, who each speak a dialect of their own, none of which are like the Burmese.

The *Laos* or *Shan* race speak a language which was primarily East Himalaic, like Mon, Kambogian, Annam, and Pa-long. Like them, it was carried at some remote period into the Brahmaputra-Gangetic province, and received some Dravidian roots. Subsequently it shared in the great eastern movement of the Himalaic dialects, from the basin of the Ganges into that of the Irawadi, where it was intimately connected with some of the intrusive West Himalaic or Tibeto-Burman dialects. It was then pressed farther into the east, into the basin of the Upper Mei-kong and Tonkin, and became the language of Yunnan. During the Han dynasty, Chinese colonies began to occupy the valleys of Yunnan, and from that time the Laos language was exposed to the influence of Chinese, and began to receive the modified form it possessed when the pressure of that great race on the older tribes of Yunnan caused the Laos people to swarm to the westward and southward. When they re-entered the basin of the Irawadi, they had acquired from their partially Chinese civilisation a superiority over the Tibeto-Burman tribes of Northern Ultra-India, which made the Laos clans predominant along the central belt of Ultra-India from the Himalaya to the mouth of the Menam.

The *Shan* or *Shyan* call themselves *T'hi* or *T'hai*, and occupy great part of Laos and Siam, and bordering districts of Burma. In personal appearance, customs, and languages, the Shan and Karen are but offshoots of the same stock. The Laos, the Shan, and the people called *Ahom* were originally the same, and once held Assam and Bhutan under their dominion. Assam, indeed, being a dialectal variation of *Ahom*. The Shan race swarm in numerous tribes over the countries stretching from the valleys between China and Tibet on the north, to the Gulf of Siam in the south, and if united would form the most formidable state in Eastern Asia. They occupy all the territories between the Irawadi and the mountains of Annam. At Bhamo, to the north, east, and south-east of which they are numerous, the language of the Shan corresponds with that of the Siamese. Their habits, mode of living, cultivation of the ground, correspond with those of the Khyen and Karen. People of the Thai

group have a superior physical development, and resemble the Balinese.

Perpetual aggressions and frequent conquests, extirpations of villages and migrations, mark the modern history of nearly all the Tibeto-Burman tribes, and of the different branches of the same tribe. In recent ages, the Laos have settled in the lands of the Singpho, the Bodo, the Burman, the Peguan, the Kambogian, and the Malay, and have originated communities having no connection with each other. The Singpho at a late period forced their way from Burma into Assam. The Bodo have occupied the country of the Mikir, and the Arung Angami and Kuki have intruded on both. The same tribes also, separated into clans and villages, are permanently at war with each other; Kuki flees from Kuki, Singpho from Singpho, Abor from Abor.

The *Mon*, called by the Burmans *Ta-lain*, and Peguans or Peguers by Europeans, long successfully contested with the Burmans the sway over the basin of the Irawadi. They were annexed to Burma in the middle of the 16th century, but again threw off the yoke in the beginning of the 18th century, and subjugated all Burma. Their range embraces the delta of the Salwin, where Moutama or Martaban was their chief port. They long preceded the Siamese in the Tenasserim Provinces, and the languages of the Semang and Binua of the Malay Peninsula retain deep traces of their ancient influence to the south. A colony is also found in the basin of the Menam. Before the great southern movement of the Laos, the Mon appear to have occupied that basin also, and to have marched and intermixed with the closely-allied Kambogians of the Lower Mei-kong. They seem to have been at one time the chief traders eastward of the Bay of Bengal.

The Nicobar Islanders appear to have been an early colony of the Mon race in its pure or more west Chinese and less Indian condition. They are flatter faced and more oblique eyed than the Rakhoing and Mon, in this resembling the more sequestered hill tribes of the Burman race. In some islands they have been much mixed with Malay colonists. Nicobar phonology is allied to that of the Selong and Semang. The entire population has been estimated at 6000 souls. They eat the pig, yam, and plantain. They dread evil spirits. They bury the dead, and deposit with the body all the small articles of property of the deceased. They are monogamic, but divorce is frequent.

Ka-Khyen.—In the Irawadi and Mei-kong basins, there are remnants of tribes strongly distinguished from the predominant races, and tending, with the evidence of language, to show that the ethnic history of Ultra-India is very ancient, and has undergone repeated revolutions. One of the most remarkable is the *Ka-Khyen*. They are described as being in their appearance not Mongolian, and totally different from the surrounding races of Shan, Burmese, and Chinese.

The *Palong*, *Pa-on*, or *Ze-baing* are partially subject to, and located to the east of, the *Mo Meit* (Mung Myit, Moun-m-ri), beyond the *Karen-ni*, and along the Chinese frontier, as far as the latitude of Bamo (Mang-mo). They are good carpenters, dyers, and blacksmiths. Their dha-or swords are exclusively used in and around

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Bamo. They approximate to the Shans, of whom they are probably an offshoot; they wear the same dress, and are Buddhist, but they have affinities with the Ka-Khyen. The Palong seem to resemble the Annamese in some respects.

A race of the same name (Panong), but to which the Siamese apply the generic name of Ka or Kha, inhabit the mountains of Laos, bordering on Kambodia. They are a coarse and debased variety of the Annam and the Kambodian type.

Chong.—On the same side of the Mei-kong basin, but towards the sea, between lat. 11° and 12° N., a hill tribe called Chong preserve more of the ancient Australo-Tamilian character than the surrounding tribes. In the Chong, the hair, instead of being stiff or harsh, as in the Mongolian, Tibetan, and prevalent Ultra-Indian and Malaya-Polynesian race, is comparatively soft, the features are much more prominent, and the beard is fuller.

The *Muong* or *Muang*, who inhabit the mountains on the west of the Tonkinese province of Thank-Hoa-noi, and stretch into China, are evidently an extension of the aboriginal or uncivilised Laos of Yunnan. The name is the Laos term for town or village which is scattered over so large a portion of the Chinese maps of Yunnan, indicating the present limits of Laos in that province.

The *Annamese*, or Annamitic group of peoples inhabiting Cochin-China and Tonkin, are a section of the division to which the Chinese belong. The Chinese designate the Annam people Ngannam. The Tonkinese call the Cochin-Chinese Kuang and Kekuang, names probably the same as Khyen and Ka-Khyen. The Cochin-Chinese, on the other hand, call the Tonkinese Kepak.

The Annamese group, amongst whom are the Moy, are found in Cochin-China and Tonkin, and two centuries before Christ the Chinese found the Annamese in possession of the basin of Sang Koi. The Annam race (comprehending under this name both the Cochin-Chinese and Tonkinese, for there is very little difference between them) are fair, but are a short, squat, and ill-favoured people, with long arms and short legs. They are probably lower in stature than any people of Central Asia. Their limbs are strong and well formed, and they are active and hardy. In point of features they bear a nearer resemblance to the Malay than to any other people; their countenances exhibit an air of cheerfulness and good-humour. The women are, to a remarkable degree, fairer and handsomer than the men, their hands, arms, and feet are well formed, and the carriage even of the lower orders is graceful. The hair of the head is worn long, and put up in a knot at the back of the head, as was practised by the Chinese before the present fashion was imposed upon them by the Manchu; and the dress of both sexes is becoming; it is the old costume of China, before the Chinese were compelled to adopt that of the Manchu conquerors. Both sexes dress nearly alike. For the lower part of the body, the covering consists of a pair of loose trousers, secured at the waist by a sash. The main portion of dress consists of two or more loose frocks, reaching half-way down the thigh. Its sleeves are loose, and with persons not compelled to labour, they dangle a foot, or even a foot and a half, beyond the extremities of the

fingers; but the labouring classes from necessity wear them short. With the women, the inner frock reaches below the knee, and the outer down to the ankles. When a Cochin-Chinese is in full dress, as when he makes visits or is engaged in the performance of religious rites, he always wears over the frocks now mentioned a loose silk gown reaching to the ankles. Both sexes wear turbands, which are put on with much neatness; and the form of this article of dress, which is always determinate, distinguishes the civil from the military order of public officers.

Cochin-China is the name given in Europe to a kingdom occupied by an Annam people. The derivation of this European name is obscure. Kachao is the name given by the Annam people to the capital of Tonkin; and Cochin-China is known to the Malay navigators as Cutchi, but they give the same name to Cochin on the Malabar coast. Cochin-China has probably been so called from the alliteration or reduplication so common with easterns, aided by the proximity of China, and may be derived from Kachao, the capital of Tonkin and China, so that Cochin-China may mean China-Cutchi. Cochin-China is bounded on the west by the Laos country. It extends between lat. 10° and 11° to 18° N. The laws and modes of punishment of the Cochin-Chinese are nearly the same as those of China. Their language, termed the Annamite, is monosyllabic, and evidently derived from that of China. Their written language, indeed, is merely borrowed in whole or in part from the Chinese, though the two languages have become so different that persons of the two nations cannot communicate either in reading or writing. Chinese, however, is the learned language of Cochin-China, with the pronunciation of the Cochin-Chinese. The Annamite language, from its monosyllabic character, presents but a small variety in the sound of the words, and a great number of significations, all indicated by the tone, are given to words spelled alike. The religion of the common people is the religion of Fo, which they call Phat; but the people readily embrace Christianity. The common language is spoken in Cochin-China, Tonkin, Ciampa or Tsampa, Kambodia, Siam, and in Laos.

The *Moi* or *Ka-moi*, who occupy the broad expansion of the Annam chain towards Kambodia, and appear to extend northwards along these mountains, marching with the Laos people on the westward, are said to be black savages, with Negro features. The Kambodians style them Kha-men. They are the Kho-men of Leyden and the Kha-men of Gutzlaff. They are very black, and resemble in their features the Caffre.

Kuanto are the aborigines of Tonkin, and must not be confounded with the Annamese.

Kambodia, lying between Siam and Cochin-China, contains about 1,000,000 people, of whom four-fifths are the native Kho. It contains the four provinces, Potisat, Kampong Suak, Kampong, and Kampot Son. Kambodia was anciently called Kamphucha. The people call themselves Khmer, and their country Sroe-Khmer, the country of the Khmer. They are called by the Siamese, Kammen; by the Cochin-Chinese, Komen; by the Chinese, Tang-po-cha; and by the Malays, Kambaja. Kambodia is the lower portion of the valley of the Mei-kong river.

The ancient territory of the Kambogians appears to have embraced all the country lying west and south of the river of Saigon, extending on the Gulf of Siam as far north as the twelfth degree of latitude, and in the interior at least to the fifteenth. The eastern part of their territory having been subjugated by the Cochinchinese, and the western fully taken possession of by the Siamese, the latter, with the co-operation of the Kambogians under their rule, have retaken Pen-nom-pen, on the great river Mei-kong, called by the Burmese Meh-kwan-mit (Moor, p. 190), but which probably receives several names in its long course of 1500 miles, till it enters the sea by several branches.

Sovereignty over the kingdom of Kambogia was claimed by Siam and Cochinchina, and the Kambogian prince, unable to resist either of the sovereigns, paid tribute to both. The Government of Siam compelled the young princes of Kambogia to reside as hostages at Bangkok. It is now under the protection of France, which has formed a colonial government over six provinces of Cochinchina, which were formerly part of the kingdom of Kambogia. The population of French Cochinchina, principally of Chinese descent, is about three millions. The provinces were obtained from the emperor of Annam by a treaty signed at Hue in 1862.

The whole of the coast from Kamas in Kambogia, quite up to what is called by the Siamese Lem Samme-san, the Cape Liant of Europeans, is an uninterrupted archipelago of beautiful islands. The Kambogians who are subjects of Siam occupy the southern districts of the Mei-kong down to the frontiers of Cochinchina. The river of Kambogia is one of the largest in Asia. It falls into the sea by three mouths, between the ninth and eleventh degrees. These three embouchures are known to European navigators by the names of the Western or Basak river, the Eastern or central branch, and the Northern or Japanese river. The first of these is the largest, and the more suitable for navigation, and is said to have from 14 to 18 feet of water on the bar at its mouth at high-water or spring-tides.

The capital was visited by a Madras officer in the year 1854, at which time the king, besides his four married wives, had three hundred other women. The women of Kambogia shave their head, leaving only a short tuft of hair. They also blacken their teeth. The Kambogians speak a language distinct from those of all their neighbours; but in physical form, manners, laws, religion, and state of civilisation, they bear a closer resemblance to the Siamese than to any other people. A few of its people have embraced Christianity.

In Kambogia, it is stated by a writer in the *Journal of the Indian Archipelago* that Buddha is there styled *Sāmonacudom*. But there prevails amongst them a pantheism, in which all nature is deified, but above all they place Buddha, and worship him daily. The *Sa tra Trayphum* and the *Sa tra Pipithum* are mentioned as two of their religious books.

The *Kho* occupy the delta of the Mei-kong in Kambogia, between Siam and Cochinchina, the remaining population being Chinese, Cochinchinese, Siamese, Malays, Portuguese, and mixed

racés. The *Kho* are the aborigines of Kambogia. Their language and that of the Mon in Pegu are said to be much more nearly allied to each other than to the *T'hai* language, which is spoken in the intervening country. The *Kho* and Siamese languages are mutually unintelligible.

Champa is a narrow mountainous tract between Cochinchina and Kambogia. The only part of the continent of Asia, the Malay Peninsula excepted, in which the Malays have settled, and to which their language has extended, is Kambogia. In that country they established the little independent principality called *Champa*, well known both in Malay and Javanese story. Both the Malays of the Peninsula and the Javanese appear to have carried on a commercial intercourse with *Champa*, and the same commerce still goes on between *Champa* and the British settlement of Singapore. The people are known in Kambogia as the *Tsiam*, and to the Annamese as the *Loi Thuan* or *Thieng*. Colonel Yule says a number of them are settled near the Great Lake.

The *Maung T'hai* or *Siam people* consist of the Siamese proper, the *Khamti*, the *Laos*, and the *Shan*. The valley of the *Menam*, throughout its whole course, is exclusively *T'hai*, and the *T'hai* attain their highest civilisation on the alluvial delta of their river. The old capital, *Ayuthia*, founded in 1351, was abandoned in 1751 for Bangkok, lower down the river, and Siamese now dominate that part of the Peninsula which extends from the Siam Gulf to lat. 7° N. Kambogia, the *Laos* of the *Lu* country, *Luang*, *Phra Bang*, and *Nan*, are also tributary to Siam. The Siamese are a Mongoloid race, as are those of *Ava*, *Pegu*, *Kambogia*, *Cochinchina*, and the *Malays*. The Siamese have large, straight faces, flat occiputs, lowness of the hairy scalp, comparatively small and firm mouth, hard staring eyes, and a grave expression. The Siamese are physically superior to the natives of the Indian Archipelago, if we except those of *Bali*; indeed, the *Balinese* and Siamese bear a striking resemblance to each other. Some natives of Siam attain a height about the middle size, and are generally well made; but their average height is 5 feet 3 inches. The hue of their skin is a shade darker than that of the Chinese, but they have fairer complexions than the *Malays* and *Javanese*. They are a busy, industrious, and enterprising people, but vain, deceitful, and cruel. *T'hai* is the native name of the Siamese, and their chief divisions are the *Laos*, *Shyan* (*Shan* or *Ahom*), and *Khamti*.

The *Laos* nation are in the interior of Siam, and their language is a variety of that of the *T'hai*. *Burma*, *Siam*, and *Tonkin* received their first culture from India, along with Buddhism, and their ancient buildings all bear the stamp of Indian origin and Indian taste of a post-Christian age; Siam in recent times has added Chinese methods of improvement to the Indian ones; while *Tonkin* mainly from China. *De Carne* mentions (p. 129) that at the close of the 18th century, when the king of Siam made himself master of *Palembang* on the Kambogia, he drove out all the inhabitants, and replaced them by others. Many foreigners, Chinese and Cochinchinese, reside in Siam, also Portuguese, French, British, and Dutch. The Siamese marriage approaches more to a civil contract than to a

religious institution. The bridegrooms are from 16 to 20 years of age, and the brides about 14 years. In Siam polygamy and concubinage are allowed. There are four classes of wives recognised, the first being those received from royalty. Relatives of the same blood do not intermarry. In Siam, the kings marry into their own family, even with their own sisters and daughters.

The wives of the Burmese and Siamese engage largely in business, take an active part in their husband's affairs, and enter into personal transactions. The wives of men of rank advise and issue orders; those of humbler station make trading voyages in boats up the river on their own account and on that of their husbands. The women of Burma and Siam attend public festivals and theatrical representations. They go abroad on foot without ostentation or affectation.

The dress of both men and women consists of a cloth wrapped round the waist, one end being brought between the legs and fastened behind, which gives this portion of their attire the appearance of a pair of trousers. In addition, women wear a cloth wrapped round the body, under the arms. Both men and women have the hair shaved from their heads, with the exception of a small round patch which is left between the crown and the forehead. This, being brushed up, is made to stand on end, which gives them a scared appearance. Paternal authority is strongly enforced.

The Chinese and Siamese have an annual ploughing festival. The Siamese kings formerly attended, and personally held the plough; but in later years it is the duty of the Phonlat'hep, or superintendent of the rice granaries, who proceeds in great pomp to a field beyond the town, where he ploughs ground sufficient to yield a crop of five measures of grain. On the second month he revisits the field, and stands on one foot for three solar hours, in invocation of the Devata.

The Siamese and the Burmese Buddhists, though they avoid killing any creature for food, eat the flesh of animals which other people have killed, as also that of creatures, cattle, and sheep that have died of disease.

Slavery exists in Siam, but only war captives are kept with severity. Gambling in every form, as with the Chinese and Malay, is common, and cock-fighting, fish-fighting, cricket-fighting, and lotteries.

Siamese appears by far the most widely spoken language of Ultra-India. It was at one time the lingua franca of Quedah, almost as much as the Malay, and even that wandering Negro tribe the Semang spoke it in some places. It was also current in Assam and Yunnan, at the opposite extremities of Ultra-India. No dialect of the Thai is intelligible to a Burmese. The alphabets also differ, but on the whole the essentials of their civilisation are the same, the chief difference being in the language. The Laos alphabet slightly differs from that of the Siamese proper, but, practically speaking, the language is spoken with remarkable uniformity over the whole Thai area, and the Siamese proper, the Laos, the Shan dialects, and the Khamti are one. From Assam to Bangkok, the difference in the language is merely that of pronunciation.

Pali is the sacred literature of the Siamese, and is called *Pali*, *Bali*, and *Pasa Makata* (*Bhasha*

Magadha), the language of *Magadha*. The talapoin or priests are enormously disproportioned to the rest of the inhabitants. In Bangkok alone their numbers exceed 30,000. The *Pheek'ho*, or priests of Siam, are taken from the mass of the people. They can revert to the laity at pleasure.

With the richer classes, the body, after the bowels have been extracted, is laid in a wooden coffin, externally lacquered and gilt, and this is placed for some days on a high table. In the meantime the priests light up tapers, burn perfumes under the coffin, and chant funeral hymns at night. A procession of relatives and friends, dressed in white and covered with white veils, follow the corpse. Beside it are borne figures of various animals or singularly-shaped monsters carved out of bamboo, and the accompanying talapoins exclaim, 'We must all die, we are all mortal!' The mourners attest their sorrow by their tears, and often hire women for the express purpose. The body is then taken from the coffin and placed naked on the pile, which is set fire to, and the remains are scorched. The body is then replaced in the coffin, and deposited under one of the pyramids erected about the temple. Graves are held sacred among the Siamese, and their violation is considered as a heinous offence. The bodies of persons killed by accident, by lightning, the still-born, those who die in child-birth or from small-pox, and suicides, are either thrown into the water or exposed to the beasts of prey. When a person dies absent from home, his heir writes his name and age on slips of paper, and burns them along with an effigy or a portrait of the deceased.

Zimmay, also written *Chang-mai* and *Xieng-mai*, is due north of Siam proper, on the Menam river, between lat. 19° and 23° N. It is tributary to Siam. Its capital has a population of 50,000. The Laos form the humbler population. The *Miaotse* or *Miautsi* are said to belong to the Thai group.

The mountain races in Siam are the *Kariang*, the *Lawa*, the *Ka*, and the *Chong*.

The *Kariang* inhabit the mountains on the N.W. frontier of Siam, as far as lat. 20° N.

The *Lawa* dwell in the same mountain range, but to the S. of the *Kariang*.

The *Ka* are in the range of mountains between the valleys of the Menam and Mei-kong. The *Ka* and the *Chong* (the *Gueo* of the Portuguese) are rude tribes, elephant hunters.

Chong are a hill tribe on the side of the Mei-kong basin, but towards the sea, between lat. 11½° and 13° N., in the hilly region at the N.E. angle of the Gulf of Siam. They preserve more of the Australo-Tamilian character than any of the neighbouring tribes. Their hair, instead of being stiff or harsh as in the Mongolian, Tibetan, and prevalent Ultra-Indian and Malaya-Polynesian race, is comparatively soft, the features are much more prominent, and the beard is fuller.

Luang Prabai, *Sien-kan*, *Muong-Nan* are also tributary to Siam. The last named is probably *Muang Loon*, a small state S.E. of *Zimmay*; and *Muang Phre Bang*, on the Mei-kong, is a larger state which acknowledges the supremacy of Siam.

EASTERN ASIA and its inhabitants have received the attention of many eminent ethnologists,—Bennett, Bickmore, Burns, Crawford, Earl, Keane,

INDIA ; THE EASTERN ARCHIPELAGO, ETC.

Jagor, Giglioli, Hogendorp, Lesson, Logan, Lubbock, Huxley, MacGillivray, De Marne, Marsden, Moor, Newbold, Norris, Peschel, Raffles, St. John, Temminck, and Wallace,—almost all of whom have resided there, some of them for long terms of years. The names which they applied to this region have been based partly on geographic, partly on ethnic, grounds; the more generally accepted being—

Indonesia, or the Indo-Pacific insular region.

Melanesia, comprising New Guinea, Australia, and all the eastern Papuan islands.

Micronesia is all the islands between Melanesia and the Loo-Choo and Japanese chain.

Polynesia, all the islands of the Pacific to the east of Micronesia and Melanesia, as far as Easter Island.

Papuanenia has been occasionally used to distinguish the northern Melanesian islands, inhabited chiefly by spiral-haired races.

Oceanica includes all the Indo-Pacific islands.

Asianesia is a comprehensive term, including the S.E. insular region, viz. Indonesia, Melanesia, Micronesia, and Polynesia.

The region embraced by these terms extends through 80 degrees of longitude and 80 degrees of latitude, from lat. 40° N. to 40° S., and long. 100° to 180° E.; and Behm and Wagner's enumeration for 1881 give as under:—

	Square kilometres.	Population.
China, viz.—		
China proper,	4,024,690	350,000,000
China Tributaries — Manchuria, Mongolia, Tibet, Zangaria, East Turkestan,	7,531,074	21,180,000
Total,	11,555,764	371,200,000
Corea,	236,784	8,500,000?
Japan and its Dependencies (Kuriles, Loo-Choo, Benin Islands),	382,447	36,357,212
Himalaya States (Nepal, Bhutan, etc.),	234,000	3,300,000
Burma, British,	229,351	3,707,646
Burma, Native,	457,000	4,000,000
Manipur,	19,675	126,000
Siam,	726,850	5,750,000
Annam,	140,500	21,000,000
French Cochinchina,	69,456	1,597,013
Cambodia,	83,861	890,000
Malacca Peninsula, Independent States,	81,500	300,000
Straits Settlements, British,	3,742	390,000
Andamans,	6,497	14,500
Nicobars,	1,772	5,000
Sunda Islands and Moluccas,	1,693,757	28,867,000
Philippine Islands,	296,182	6,300,000
Dutch Possessions, including New Guinea and the Papuan Islands,	1,462,400	27,962,000
North Borneo, British,	57,000	150,000
Australasia, viz.—		
New South Wales, . . . . .	...	751,468
Victoria, . . . . .	...	62,346
Queensland, . . . . .	...	213,525
South Australia, . . . . .	...	279,865
West Australia, . . . . .	...	31,000
Tasmania, . . . . .	...	115,705
New Zealand, . . . . .	...	489,953
New Guinea,	785,362	500,000
New Guinea — Neighbouring Islands,	22,594	

Oceanic islands, viz. the Society Islands (Tahiti, Moorea, etc.), Tuamotu group, Gambier group, etc.—

	Square kilometres.	Population.
Fiji, . . . . .	...	121,884
Melanesia,	145,855	617,000
Polynesia,	9,791	121,500
Sandwich Islands,	17,008	57,985
Micronesia,	3,530	91,000

The Eastern Archipelago lies entirely within the tropics. It overspreads an area from lat. 10° S. to 10° N. of the equator, and forty-five degrees of longitude (95° to 140° E.), measuring upwards of 4000 miles from east to west, and about 1800 miles from north to south. Three of the islands, Borneo, Sumatra, and New Guinea, are larger than Great Britain; Java, Luçon, and Celebes are about the size of Ireland. The region here indicated is known usually as the Archipelago, also the Eastern and the Malay Archipelago. This Archipelago is marked by a chain of active and extinct volcanoes through the whole length of Sumatra and Java, and thence by the islands of Bali, Lombok, Sumbawa, Flores, the Servatty islands, Banda, Amboyna, Batchian, Makian, Tidore, Ternate, and Gilolo to Morty Island. Here the belt is broken and shifted 200 miles to the west, to North Celebes, from which it passes on to Siau and Sanguir, to the Philippine Islands, along the eastern side of which it continues in a curving line to their northern extremity. From the extreme eastern bend of this belt at Banda, for 1000 miles, to the north-east coast of New Guinea, is a non-volcanic district. But there, on the north-east coast of New Guinea, another volcanic belt can be traced through New Britain, New Ireland, and the Solomon Islands to the farthest eastern limits of the Archipelago. The united length of these volcanic belts is 90 degrees, their width about 50 miles; but for about 200 miles on either side of them, evidences of subterranean action are to be seen in recently elevated coral rock or in the barrier coral reefs, which indicate recent submergence.

Five European powers, Spain, Portugal, Holland, France, and Britain, have sought dominion in the Archipelago. Portugal has now only Macao and the Dilly settlement in Timor. France is directing her attention to Annam and Tonkin on the mainland. Great Britain claims possession, including Hong Kong, of 1400 square miles; Holland, 600,000 square miles, and rules over 26,000,000 of Asiatics; and Spain, 116,000 square miles, with eight millions of Asiatic subjects.

Mr. George Windsor Earl, in the middle of the nineteenth century (1855), made known to geographers that a continuous submarine bank stretches out from the Malay and Siamese peninsulas, embracing Sumatra, Borneo, Java, and as far as the Philippines. It extends all along the east side of Asia, from lat. 8° S. to 6° N., 1200 miles from N. to S. and 1500 from E. to W. The soundings in this vast area are all under 100 fathoms, but the greater part from the Gulf of Siam to Sumatra and Java is under 50 fathoms. East of this succeeds the seas of the Straits of Macassar and Lombok, more than 100 fathoms deep. Then begins another bank which unites New Guinea and other Papuan islands, the Celebes, the Timor group, the Moluccas, as far as Aru Islands, Mysol, and Waigiou, with Australia.

It is now the opinion of naturalists that the Asiatic continent once included Java, Sumatra, and Borneo, probably also at an earlier period the Philippine Islands; also that the Australian continent included the Timor group, the Celebes, the Moluccas, and the Papuan Island, and that the islands of the Asiatic division on the one hand, and those of the Australian on the other, have been disrupted from their original continents by the violence of their respective volcanoes; that the phenomena of volcanic action have been all of comparatively recent occurrence, and have not wholly obliterated the traces of the ancient distribution of land and water.

These views have been arrived at from the fact that the natural productions of the Asiatic islands and those of the Australian islands widely differ. The elephant and tapir of Sumatra and Borneo, the rhinoceros of Sumatra and Java, the wild cattle of Java and Borneo, belong to the same genera which inhabit part of Southern Asia. Similarly with the birds and insects, every family and almost every genus found on any of the Asiatic islands occurs also on the Asiatic mainland, and in a great many instances even the species are identical.

On the other hand, neither Australia nor the Australo-Malay islands have ape or monkey, cat or tiger, no wolves, no hyenas, no bears, no elephants, horses, sheep, deer, or oxen. But Australia and the Australo-Malay islands have the opossum and the wombat; and the kangaroo, long supposed to be peculiar to Australia, is found both in the Aru Islands and in the southern part of New Guinea.

The Asiatic division has woodpeckers, pheasants, barbets, and fruit thrushes, but no cockatoos or brush-tongued lorries. Australia and the Australo-Malay islands have none of the former, but are the natural home of the latter.

Lastly, Mr. A. R. Wallace formed the opinion that all the peoples of the various islands can be grouped either with the Malay or the Papuan, two races differing in their physical, mental, and moral characters. In this view he carries out Mr. Earl's idea, and he is of opinion that a line can be drawn which shall so divide the islands as to indicate the one-half which truly belong to Asia, while the other with no less certainty is allied to Australia, and he designates these respectively the Indo-Malayan and the Austro-Malayan divisions of the Archipelago.

The races occupying the islands, speaking broadly, are Malays or Papuans; but Mr. A. H. Keane has classed them as Malays, Molucca-Malays, Malayo-Papuans, and Papuans, as under:—

i. The Asiatic Malay Islands.

Group 1. The Indo-Malay Islands, viz. Sumatra, Java, and Borneo, with Malay inhabitants.

ii. The Australo-Malay Islands.

Group 2. The Timor Islands, viz. Lombok, Sumbawa, Flores, and Timor, with Malayo-Papuans.

Group 3. Celebes, Sula Islands, and Bouton, with Malay inhabitants.

Group 4. The Moluccas, with Molucca-Malays in Bouru, Ceram, Batchian, Gilolo, Morty, Ternate, Tidore, Makian, Kaica, Amboyna, Banda, Goram, and Matabello.

Group 5. The Papuan Islands, New Guinea or Papua, Aru Islands, Ke Islands, Mysol, Salwatty, Waigiou, and others.

Of dark and brown types, Mr. Keane (p. 593)

recognises four distinct stocks,—one of various shades of brown, and three of a distinctly dark type, physically different, speaking languages which belong to radically distinct linguistic types, while the varieties of the brown stock are one in speech and physique. The three dark races are the Austral of Australia, the Negrito, and the Papuan.

The *Negrito* occur in Luçon and other of the Philippine Islands, the interior of Malacca, and the Andamans. Those in the Philippines are the *Aetas*, *Aitas*, or *Itas* of Spanish writers, a term in Tagala meaning black, the same as the Malay *هيتيم*, *hetam*. Those of the Andamans are the

Mincopi, and those in the Malay Peninsula are the *Semang* and *Bila*. The Papuans, another of the black type, Papua, from Malay *پاپوا*, *papuwah*, meaning curly, have also been called *Melanesians*. They are found in a pure state, or mixed with other races, in all the islands stretching from about the meridian of Flores eastwards to Fiji. They have sometimes been called *Alfuro* and *Harafora*, which some writers apply to heathen, i.e. the non-Muhammadan and non-Christian tribes interspersed in Bouro, Ceram, Flores, Gilolo, and simply means non-Muhammadan.

Malayo-Polynesian, Indo-Pacific, Micronesian, and Maori are names which have been applied to the three types of the brown races; but Mr. Keane prefers that of Malay for the western branch, Micronesian for the north-western group, and Maori or Polynesian for the large brown races of the Eastern Archipelagoes. He says that the Papuans are pure only in the interior and western parts of New Guinea, Aru, Waigiou, Salwatty, and other islands. On the N. coast of Australia, they are mixed with the Austral stock.

In the Admiralty, New Britain, and all the Archipelagoes from New Guinea east to Fiji, they form the basis of the population intermingled with the Maori race. These are Maori-Papuans. In the Indian Archipelago, from Timor Laut westwards to Flores inclusive, they are blended with Malayan elements. These are Malayo-Papuans. New Guinea, he says, has at least two, but probably three tribes, viz. Papuan, Negrito, and Maori, but the presence of Maori there needs confirmation.

The races and their varieties present marked differences in their physical formation, even as to the mere heights, as will be seen by their measurements in millimetres, as under:—

Hottentots,	1286	North Chinese,	1675
Tagala,	1562	Congo Negroes,	1676
Japanese,	1569	English-Irish,	1690
Amboynese,	1594	Sandwich Islanders,	1700
Jews,	1599	Kanaka,	1700
Zingani,	1609	Scotch,	1708
Australians,	1617	Kafirs,	1758
Siamese,	1622	Maori,	1767
Madurese,	1628	Danes,	1685
South Chinese,	1630	Swedes,	1700
Nicobarians,	1631	Norwegians,	1728
Roumanians,	1643	Germans,	1680
Sundancese,	1646	French,	1667
Javanese,	1657	Italians,	1668
Magyar,	1658	Spaniards and Portuguese,	1658
Bugis,	1661		
North Slaves,	1671		

Negrito.—The Malay race, in stature, are inter-

mediate between the Papuan and the Negrito. The Papuan are taller than the Malay, but the Negrito are about 4 feet 6 inches or 4 feet 8 inches, or 8 inches shorter than the Malays. The Negrito nose is small, flattened, or turned up at the apex, while the Papuan nose is large and prominent, with the apex prolonged downwards. The Negrito hair is the same as that of the Papuan and also of the African. The Negrito of the Philippines, the Semang and Bila of the Malay Peninsula, and the Mincopi of the Andamans, agree with each other. The Negrito are living in Luçon, Negros, Panay, Mindoro, and Mindanao to the number of 25,000, but are also in Palawan and Formosa. They are small in stature, but well made.

Of the *Malay race*, there are three broad ethnic divisions, viz. the Orang Malayu, the Orang Laut, and the Orang Binua.

The *Orang Malayu* are civilised communities in Sumatra, Malacca, Borneo, etc., are all Muham-madans, and speak High Malay, with a literature written in the Arabic character.

The *Orang Laut*, literally sea people, are known as the Baju Laut of Celebes; and Mr. Keane supposes them to be akin to the Lanun of Borneo and Illanos of Mindanao. They live in their boats on the water, engaged in fishing and addicted to piracy, or, as De Barros says, 'Cujo officio he rubar e pescar.'

The *Orang Binua*, or men of the soil, known also as Orang-Utan or wild men, as Orang Gunong or hillmen, likewise as Orang Darat or landmen, are wild, savage, and unlettered tribes of the interior of Malacca, parts of Sumatra, Rhio-Lingga, and other islands in the Straits of Malacca. They speak in rude but pure Malay dialects, are in numerous tribes, with names given from the rivers and the districts they occupy.

The *Malay language* proper, wherever current in the Archipelago, is spoken with remarkable uniformity; and that spoken even by the ruder uncivilised tribes in Malacca and Sumatra, known as the Low Malay, does not differ from the High or Literary Malay.

Malay proper is vernacular in Malacca, in a large part of Sumatra, in the islands of Billiton, Banca, Panjor, Penang, Singapore, Rhio-Lingga, Banda, in parts of the Moluccas and Timor, and generally round the coast of Borneo.

Orang Laut.—The custom of living on the water is common in various parts of Southern Asia; it is in some countries occasioned by necessity. But the people who are called Rayats on Banca and in the neighbouring seas, adopt it by choice, and preserve it in situations which would afford a more comfortable mode of life. They are probably dispersed through all the countries where the Malay language is current. They always formed part of the subjects of the Malay princes during their prosperity at Malacca and afterwards at Johore. Those of them who have preserved their manners pure, dwell in small prahus, which carry their possessions and families. These are of the size and class of the vessels distinguished among the Malays by the name of prahu kakap, probably from their supposed resemblance to a fish of the same name in their form and motion; they are equally adapted to rowing and sailing. Their after part is the kitchen, and here a small stove is permanently fixed; the central space serves for

their usual occupations during the day, and for their rest at night; several large mata, which are rolled up in the day time, form its principal furniture; their fore parts contain a small chest, in which they preserve their articles of value. During the night, and in bad weather, the vessel is covered by a light mat (or kajang), which, when not in use, is folded over the posterior part. The furniture of each prahu is very simple. One harpoon with a shifting point, and a spear-like implement for searching for crabs in the sand, some empty cocoanut shells, with oar and paddles in proportion to the size of the vessels, are always found; besides these, a drum and a comb of uncommon size; most prahus carry a favourite cat. A number of long wooden lances, as their common weapon of defence, are always placed in conspicuous parts. These they wield with much dexterity. The larger prahus (especially those intended for warlike purposes) are provided with rantakkas, firelocks, spears, and Malay cutlasses.

Each prahu carries a large sail. The day is spent in small excursions on the ocean; at night the vessels are anchored near the shore or fixed to a pole. Smaller vessels are generally drawn upon the beach. When opportunities allow, they seek the shelter of small bays or the outlets of rivers. They often subsist for many days, successively on fish, crabs, oysters, or mussels, which they consume indiscriminately, but they are extraordinarily fond of vegetable food, and whenever they have an opportunity all of them devour double the quantity of rice that will suffice another Malay. The places they occupy or have lately visited are easily known by the remnants of fish, by piles of shells, etc., and are also indicated at a great distance by a nauseous odour. Cleanliness is by no means one of their qualities; they are rarely exempt from eruptions on the skin, and they complain of diseases of the bowels.

They spend their time chiefly in fishing or in preparing fishing-tackle of various kinds. The preparation and arrangement of the leaves of a species of pandanus for sails is the business of the females. Those who have attached themselves to a particular spot sell and barter dried fish, trepang, agar-agar. In the year 1825 the Carimon Islands (Krimun) were occupied by Orang Laut, who plundered when they could do it with impunity. The Carimons, from their central position, were a favourite haunt of pirates, and the strait separating the two islands was seldom without some of their boats.

Sumatra is between 128,500 and 140,000 square miles in area. Its inhabitants have been estimated at from 2 to 4½ millions. Among the people of the Archipelago generally, the island is known as Pulo Purichu, also Pulo Indalas; the Javanese term it Tana-Palembang, the land of Palembang. The origin of the term Sumatra is unknown. The Malay races proper occupy about half the area of the island. Their chief tribes are the Korinchi, the Orang Rawa, Orang Palembang, Rejang, Serawi, Lampong, Batta, the Orang Kubu or Orang Lubu. Marsden mentioned the Orang Gugu, and in the southern belt the Orang Abung, described as a head-hunting race.

Excepting Menangkabau, the whole coast of Sumatra is nominally under five sovereignties, viz. Palembang, Jambi, Indragiri, Siak, and Acheen. Menangkabau province is the plateau in the in-

terior, north of the town of Padang. Palembang is nearly all Muhammadan.

The *Achi* or Achinese are the most civilised, and through them Muhammadanism, with such arts and civilisation as accompanied it, were directly or indirectly communicated to the other islands in the Archipelago. They are supposed to be a mixture of the *Batta* and Malay with the Arab, and with the *Chulia* natives of the west of India. During the latter half of the 17th century, four queens reigned in succession over Acheen.

The *Batta* are partly under the Dutch, partly independent, and the latter continue cannibals. They do not allow marriages between people of the same clan.

In Sumatra there were formerly three perfectly distinct kinds of marriage,—the *Jugur*, in which the man purchased the woman; the *Ambel-anak*, in which the woman purchased the man; and the *Semando*, in which they joined on terms of equality. In the *Ambel-anak* marriage, the father of a virgin makes choice of some young man for her husband, generally from an inferior family, which renounces all further right to or interest in him, and he is taken into the house of his father-in-law, who kills a buffalo on the occasion, and receives twenty dollars from his son's relations. After this, the *buruk baik'nia* (the good and bad of him) is invested in the wife's family. If he murder or rob, they pay the *bangun* or the fine. If he be murdered, they receive the *bangun*. They are liable to any debts he may contract in marriage, those prior to it remaining with his parents. He lives in the family in a state between that of a son and a debtor. He partakes as a son of what the house affords, but has no property in himself. His rice plantation, the produce of his pepper garden, with everything that he can gain or earn, belongs to the family. He is liable to be divorced at their pleasure, and though he has children, must leave all, and return naked as he came.

A Sumatran scrupulously abstains from pronouncing his own name, merely as a punctilio in manners. It occasions him infinite embarrassment when a stranger, unacquainted with their customs, requires it of him. As soon as he recovers from his confusion, he solicits the interposition of his neighbour. He is never addressed, except in the case of a superior dictating to his dependent, in the second person, but always in the third, using his name or title instead of the pronoun; and when these are unknown, a general title of respect is substituted, and they say, for instance, '*Apa orang kaya-punia suka*,' 'What is his honour's pleasure?' for 'What is your or your honour's pleasure?' When ignominious persons are spoken to, use is made of the personal pronoun *kau* (a contraction of *angkau*), particularly expressive of contempt.

People of rank allow their finger nails to grow to a great length. Both sexes file their teeth, and blacken them with the empyreumatic oil of the coconut shell. The *Lampung* women have their teeth rubbed down even with their gums. Others have them formed into points, or have the ends rubbed off and the stumps blackened. Their chiefs sometimes set their teeth in gold, by casing the gums with a sheathing of that metal.

Java is supposed to have had early intercourse with races trading down the Red Sea. From the

12th to the close of the 15th century, it was ruled by sovereigns professing the Hindu religion, and many architectural remains are to be seen throughout the island. In 1478, the *Majo Pahit* dynasty was overthrown by the Arabs. Subsequently, in 1511, the Portuguese reached Java, followed a century later, 1605, by the Dutch, who since 1609 have partially occupied it, except for the years 1811 to 1816, when the British captured it. In 1880, Java and Madura had an area of 2380·7 geographical square miles, with a population of 19,797,077 inhabitants, viz.—

Javanese, . . .	19,542,835	Europeans, . . .	33,703
Chinese, . . .	206,915	Others, . . .	3,092
Arabs, . . .	10,528		

The Javanese are a Mongoloid race, with mild, placid, prepossessing features, and lank hair. They are taller than the *Bugia*. Their limbs are slender, and wrists and ankles small, and the colour of their skin is yellow. They are enthusiastically fond of poetry, and have a delicate ear for music.

Until the middle of the 19th century there was a remnant of an aboriginal race in the *Tengger* mountains following Hinduism, and the *Kalang* and *Bedui* are hill and forest tribes. The Arabs are religious teachers, the *Bugia* are settled on the sea-coasts. In the western part of the island, the Malays speak the *Sunda* language, but the bulk of the people speak Javanese, which has a high and low dialect, with many Sanskrit words.

Madura is separated from Java Island by a strait not more than a mile wide. Many of the *Madurese* have settled on Java. The people are of martial tendencies, but victims of cruel and degrading superstitions. Its population is 810,135, of whom 3932 are Chinese, 1516 Arabs, and 509 Europeans.

Bali Island is immediately to the east of Java, of which it looks like a continuation. In parts of Java, in *Lombok*, in parts of Sumatra, amongst the *Dyak* of Borneo, and the Philippine islanders, there are remains and customs indicative of a Hindu origin; but in Bali, since A.D. 1478, the entire population, amounting to about one million, profess the Hindu religion, and the burning of widows amongst them is carried to an extent never known even in continental India. The slaves of a great man are also consumed upon his funeral pile; and when the immense annual loss of life produced by these frightful practices is considered, it is surprising that the island possesses so large a population. They are fairer in complexion, stouter in frame, and more energetic in their dispositions, than the Javanese, and in appearance and dress bear a great resemblance to the natives of Siam. The Balinese entertain a great aversion to a maritime life, and are more rarely to be met with at the European ports than the natives of the other islands to the eastward. Bali women, like the Burmese, attend to the selling of goods and merchandise.

Women take precedence, not only by custom, but by law; if unmarried, according to the rank of their fathers, and if married, according to the rank of their husbands. The men are indolent, and abstain from labour, and men of all ranks receive great assistance in their households, and in conducting their public duties, from the skill, activity, and zealous intelligence of their wives. The Balinese abduct their intended partners,

running away with them into the woods, where they remain concealed until the friends of the young man are able to compensate the family of the girl, when they return and live together as man and wife. The amount paid ranges from Rs. 100 to 200, 20 per cent. of which falls to the king. The language of Bali is of the same family as the Javanese, from which, however, it differs in its terminations. The court language (Bhasha Dalam), the ancient Kawi, is spoken by the king. There is an active volcano in the island, and earthquakes occur from time to time.

Banca Island in its interior has a hill race or Orang Gunong, but its littoral is occupied by cultivators, and around the coasts a maritime people, the Orang Lant, dwell in their prahu boats. These are similar in their habits to the Baju Lant of Borneo and Celebes. They subsist entirely by fishing. This island abounds in tin, and many Chinese have been working the mines.

Borneo is the principal island of the Sunda group. After Australia, it is the largest island on the globe, as large as France and England combined. Stein estimated it at 210,107, and the Penny Magazine at 286,000 square miles, with 3 to 4 millions as its population. Its many tribes take their tribal names from the river basins or the districts they inhabit, and thus we have the Dyak clans, Orang Dusun, and the Orang Sampit from these rivers; and in the north of the island are the Sarebu Dyaks, Sakarran, Lundu, Sibnuw, established on the rivers which bear these names. Other rivers are the Borneo, Banjarmassin, Passir, Coti, Pontianak, and Sambas.

The better known tribes are Malay, Suluk, Baju, Balagnini, Dusun or Dusun, Illanun, Kadayan, Bissaya, Murut, Kalamut, Tutung, Kyajao, Kayan, Dyak, Tatao, Kanawit, and Melando. The sea-coast has tribes totally unconnected with each other, each with its own manners and customs, and governed by its own laws. The west is occupied by Malays and Chinese; the north-west by the half-caste descendants of the Muhammadans of Western India; the north by the Cochin-Chinese; the north-east by Sulu; and the east and south coasts by the Bugis tribes of Celebes. There are, besides, numerous seafaring tribes, who live in prahus in islands near the coast; amongst others, the Lanun from Magindanao, and the Orang Baju and Orang Tidong, source unknown.

Since A.D. 1244, Malays from Malacca, Sumatra, and Java have been settled along the coast. On the east coast there is a great admixture of Bugis blood. All the rajas and principal men are Bugis, or have Bugis relatives in Celebes, and there are also many Bugis in the Western Residency. The greater part of the coast is dotted, rather than peopled, with Malay settlements.

The Dyak inhabit thatched bamboo houses, erected on piles 18 or 20 feet high, those belonging to each family or petty tribe being joined together by means of a stage or verandah running along the front, and reached by ladders, which are pulled up at night. Many of the smaller villages are defended by stockades. The Jangkang Dyaks dwelling on the Sakiam, a branch of the Sadong river, are said to be cannibals. The men of this tribe file down their teeth to a point, like the teeth of a saw. Until after the middle of the 19th century, the Dyak tribes were

constantly at war with each other, making forays for heads, which they suspended in their houses. A man could not marry until he procured a head, and distant voyages and every stratagem were adopted to obtain these.

The Kyan, a powerful tribe, about 100,000 in number, occupy the country from the south of the kingdom of Brunei, right away into the interior. They are the most martial tribe in Borneo, fierce, hot-blooded, and reckless of life. The Kyan have eleven tributary clans, several of whom, both men and women, tattoo. The Kyan and the Idaan or Murut are said to be addicted to human sacrifice; and they arrange skulls about the houses.

Mr. Burbidge (Gardens of the Sun) has given the latest and best account of the present state of the inhabitants. He tells us that the Kadyans are a peaceable and well-disposed tribe of aboriginals, who, living along the coast near to the capital, have mixed a good deal with the Malays, and speak their language. Some of the older and more intelligent men of this tribe are well acquainted with the Murut, Dusun, and the Brunei dialects. Although the Kadyan people are nominally Muhammadans, their women enjoy the greatest freedom, and are never secluded, as is the custom of the Malays of the coast; indeed, many Kadyan houses consist of one very large room only, there being no private apartments of any kind. This is a rather singular trait of these people, since even the Murut and the Dusun have one side of their houses partitioned off so as to allow of a separate private room for each family.

The Dusun villagers keep bees and export wax in quantity, and most of the tribes collect the varied natural products of the sea or of the forest in their respective districts.

The physique of the inland tribes, especially of the Dyak, Kadyan, and Murut, is superior to that of the Malays.

Murut women, whether in boats or afield, appear to be as active as the men. Their hair is often very gracefully wreathed up with a string of red or amber-coloured beads, sometimes with a strip of the pale-yellow nipa leaf in its young state, and the colour contrast is then very effective. In Borneo and elsewhere in the Malayan islands, Orang-Utan (literally wild man) is applied not only to the large red monkey, but also to the aboriginal inhabitants of the interior. The Murut are frequently spoken of as Orang-Utan, not only by the Malays, but also by the Kadyans, a tribe of aboriginals converted to the Muhammadan faith. The Murut have a great love for gong music; and now and then a cheap German gun or old Tower musket is obtained from Chinese traders. Spears, blowpipes, krissees or parangs (swords), and their ghastly baskets of human skulls, form their only accumulated wealth.

With the Murut, one enormous house is built, sufficiently large to accommodate from twenty to fifty families. These houses vary from 80 to 100 yards in length, and, like those of the Kadyan, are built on piles, so as to be better prepared for resistance in case of a sudden attack. The Murut and the Kadyan who live in the vicinity of the Baram river, and one or two other tribes of the aboriginal Borneans, still continue the practice of head-hunting, although the custom is now fast dying out here, as it has in the case

of the Dyak of Sarawak and other places farther south. Long after the middle of the 19th century, a youth was not allowed to marry until he had taken the head of an enemy, and if any ill-luck or death occurred in the tribe, head-hunting raids were indulged in at once to appease the malignant spirits which were believed to have been the cause; or if a chief's favourite wife or child died, he at once took to head-hunting in a blood-thirsty spirit of revenge. The Murut and other aborigines are great believers in omens, and whether on head-hunting or pig-killing expeditions, they pay great regard to the cries of birds and animals.

The Baju, Lanun, Balagnini, and Sulu tribes, who inhabit the north of Borneo and the islands to the north-east, are given to piracy. The *Lanun* or *Illanun* long infested about 300 miles of the north-west coast, by cruising to other parts of the Archipelago, plundering villages, and often carrying off whole populations into slavery. The *Lanuns* on the coasts north of Menkabong are petty traders or cultivators. The *Duson*, who live in the hills farther from the coast, give them a bad character.

The *Orang Baju* or *Baju Laut* profess Muhammadanism. They live in boats at the mouths of most of the rivers on the east coast. Their boats are 8 or 10 tons each, and when in harbour are covered with a roof of matting. They are fishermen and collect trepang.

The *Orang Tidong*, a hardy, seafaring race, occur to the north of the *Baju Laut*. They cruise among the Philippine and Sulu Islands, disposing of sago, which is their principal food. They are said to be occasionally cannibals.

The Chinese settlers are largely engaged in working the gold mines. Coal, diamonds, iron, antimony, mother-of-pearl, caoutchouc, gutta-percha are also products. The elephant, rhinoceros, leopard, ox, hog, orang-utan, and others of the monkey tribe.

The Bornean *Malays* may be said to have but little literature; the Koran, a few MS. poems, prayers, and tales are the only books generally seen in the inland; but the people possess a vast amount of traditional lore, and many of their songs refer to the history of the country, the beauty of their women, or to the personal attributes and prowess of their former rulers. Malay romances and minstrelsy are alike rich in imagery. Malay is the court language at Brunei, but the inhabitants generally use a dialect similar to that of the aborigines who live near the capital. Slavery, although not yet abolished in Borneo, is not nearly so common as was formerly the case.

Amboyna, Banda, Ternate, Tidore, and others in the neighbourhood are small volcanic islands, fertile in fine spices. The clove tree grows spontaneously in Ternate, Tidore, Motir, Makian, and Batchian.

The Amboyna people are of the Malay race, short, squab, and darker than the Javanese; they are gentle, sober, brave, easily managed, make good mounted or infantry soldiers, and a considerable number of them have embraced Christianity.

The Buro people consist of Malays of the Celebes type, often exactly similar to the Tomore people of East Celebes who are settled in Batchian. These form the bulk of the population. Another

race, in smaller numbers, resemble the Alfuro of Ceram.

Ternate, Tidore, Motir, and Makian are only trachytic cones, standing on the same great fissure of the earth. The Ternate people consist of Malay, Orang Sirani, and Dutch.

Celebes Island is in the Molucca Sea. It extends from lat. 2° N. to 6° S., and from long. 125° to 129° E. It is composed of four peninsulas, forming gulfs. Some of the mountains rise to 7000 feet above the sea, Klabat in the Northern Peninsula being 6600 feet. In the north of Celebes there are several active volcanoes.

The population is over a million, and is composed of several of the Malay nations. Of these, the Wugi, Bugi or Bugis are the most advanced in civilisation.

In 1512, Celebes was taken possession of by the Portuguese, who were displaced in 1660 by the Dutch, and the British kept it from 1811 to 1816. One of the Dutch Residencies is at Mang Kasara, which has been modified into *Macassar*, and *Macassar* men is a common name for the Bugi. Many of them have adopted Christianity. They are the great traders and navigators of the Archipelago. At the beginning of the western monsoon they go in great numbers to the Aru Islands, which is the principal rendezvous for the people of Ceram, Goram, the Ki Islands, Tenimber, Baba, Kilwaru, and the adjacent coast of New Guinea, a distance from Macassar of upwards of 1000 miles. They are of the Malay family, but, although exposed to the same temptations, they have never been pirates; they defend themselves against the Malay prahus with the most heroic and desperate valour, and if overpowered will blow up their vessels rather than submit. They are the Phœnicians of the Archipelago, and are to be seen on every coast from the northern parts of Australia to the Malay Peninsula. With the eastern monsoon, they sail westwards until they reach Singapore. The Alfuro race thinly occupy the elevated woody parts.

The *Minahassa* people, of the Malay family, up to the early part of the 19th century were head-hunters like the Dyaks of Borneo, and, like them, built their houses on posts 20 feet or more above the ground, and 90 to 200 feet long, and 48 feet broad, to contain 16 or 20 households.

Around the coasts, a fishing and seafaring race, the *Orang Laut*, dwell in boats.

The languages current are the Bugi, Macassar, Bouton, Salayer, Tomore, Tomohow, Langowen, Ratahan, Belang, Tanawauko, Kema, Bantek, Mehado, and Belanghitam.

Batchian, in lat. 0° 30' S., and long. 127° 30' E., 54 miles long and 20 miles broad, is separated from Gilolo by a narrow channel. Its inhabitants profess Muhammadanism. The interior is uninhabited, there are only a few villages on the coasts. The Batchian Malays differ very little from those of Ternate. Their language, however, has more of the Papuan element in it, with a mixture of pure Malay, showing that they are formed from stragglers of various races, almost homogeneous. The Orang Sirani (qu. Nasrani or Suryani) are Christians of Portuguese descent, like those of Ternate. Many of these have a Portuguese physiognomy, but their skin is generally darker than that of the Malays. They speak Malay, with a large number of Portuguese

words and idioms. The Orang Sirani are very fond of dancing. In 300 years, they have changed their language and lost all knowledge of their nationality, but in manners and appearance they are almost pure Portuguese. Everywhere in the east, where the Portuguese have mixed with the native races, the offspring are darker in colour than either of the parent stocks. This is the case with the Orang Sirani, and with the Portuguese of Malacca and Goa. This is not the case in South America, where the Mameluco, the offspring of the Portuguese and Indian, is often fairer than either race, but always fairer than the Indian. The Orang Sirani are as civil, obliging, and industrious as the Malay, but they consider themselves of a superior order, and are inclined to trade and commerce rather than to manual labour.

The *Galela* men from *Gilolo* is a third race, and a fourth race is a colony from Timor, in the Eastern Peninsula of Celebes, who were brought there many years ago, at their own request, to avoid extermination by another tribe. They have a very light complexion, open Tartar physiognomy, low stature, and a language of the Bugis type. They are an industrious agricultural people, and supply the town with vegetables. They make a good deal of bark cloth, similar to the tapa of the Polynesians. A cylinder of bark is taken off and soaked and beaten till it be as thin and as tough as parchment. It is used for wrapping up clothes; also dyed with a bark dye, and sewed into jackets.

Gold has been washed for in the island of Batchian ever since 1774. Batchian and Tawali Islands are separated by a narrow strait.

The *Keffing Islands* is a little group of 17 islands, in the Molucca Sea, encircled by very extensive reefs projecting into deep water, and rendering them difficult of approach. The cachalot or sperm whale abounds in the ocean, and might support an extensive fishery. Some of the islets are low, sandy, girdled by reefs, and, as in *Ghissa*, with a lagoon in the centre, absolutely swarming with fish, while the shores are peopled by ducks and snipes. Their inhabitants resemble those of the S. coast of Ceram, and are not of the Papuan or Negro race. They are great traders, and constantly visit New Guinea, and purchase birds of paradise, luri, crows, pigeons, megapodiidae, and scented woods.

Pulo Manok, or Bird Island, lies midway between Ceram and the Serwatty group. It is a high solitary mountain resting on the bosom of the sea, with a truncated cone, desert, and the refuge only of myriads of birds, which deposit such vast quantities of eggs, that many of the natives of the neighbouring islands visit the place and subsist for whole days on this wholesome food. Sulphur is also found on the rocks.

The little communities existing in these scattered groups present curious phases of social life. Dwelling in houses erected on posts, they in many instances surround their villages with rough walls of coral, occasionally carrying a similar fortification all along the shore. Many of them, apparently peaceful traders, were secretly addicted to piracy, though some bore a character for innocence and love of industry altogether inconsistent with this pursuit. Among these are the inhabitants of *Motir*, a trachytic

cone south of *Makian*, a gentle, tranquil, sober tribe, following the occupation of potters, and supplying the neighbouring islands with vessels and utensils of various kinds made of red clay, elegantly moulded and of good quality. These compete in the markets of the Molucca Sea with the plates and pans brought by the traders of *Keffing* from the *Ki Islands*.

Savu Island, one of the Sunda group, is on the south of Flores. Mr. Wallace says (ii. p. 277) that *Savu* and *Rotti* have a handsome race with good features, distinct from the Timorese or Papuans, and whom he classes with the Malays of the western islands of the Archipelago.

The Negroid tribes of the S.E. of Asia have been variedly classed by Lesson, Macgillivray, Earl, Logan, Bismore, and Wallace. There are two very distinct varieties amongst them,—a diminutive statured, who have been styled *Negrito*, with a larger, even stalwart people, who are equally black, but called by the Malay term *Papua*, from their curly woolly hair, which, however, is a characteristic alike of *Negrito* and *Papua*. Also on the coasts of the more westerly islands, and on those of the islands to the eastward, Malay and Polynesian tribes have settled, and intermarried with the *Negrito* and *Papua*, and their descendants appear in modified forms of the two aboriginal races. The pure but less martial *Negrito* have taken refuge in the mountain fastnesses of their islands. Also *Peschel* arranged the Papuan race into an Australian and an Asiatic group, comprising in the latter the *Alfur*, *Mincopi*, *Negrito*, and *Semang*, but there is no marked difference between these. The Andaman islanders, called *Mincopi*, are decided *Negrito*, as also are the *Semang* and *Bilo* of the Malacca States of *Quedah*, *Perak*, and *Kalantan*; and there was said to be a tribe in the neighbourhood of the *Timboro* mountain in *Sumbawa*. The known tribes of the *Mincopi* are said to be the *Akakol*, *Arokojuwai*, *Balawa*, *Bogijab*, *Bojingijida*, *Jarawa*, and *Yerewa*, speaking different languages.

In a N.W. direction from New Guinea, the Papuan race extends through the Moluccas to the Philippines, but in those islands they only appear in small and scattered tribes, occupants of the mountain fastnesses. From New Guinea to Timor, again, the small islands, with the exception of the *Aru*, are occupied by a race whom Earl designated *Malaya-Polynesians*; but at Timor, especially near the N.E. end, a Papuan race reappears, though not, in his opinion, in a pure state. Some on the island of Flores or *Mangarai* assume a more decided Papuan character. Mr. A. R. Wallace (ii. p. 104) describes the Papuan face as compressed and projecting, brow protuberant and overhanging, mouth large and prominent, the nose very large, the apex elongated downwards, the ridge thick, and the nostrils large,—the nose is an obtrusive feature, the beard is twisted, and the hair of the head is frizzly. In mental and moral characteristics the Papuans differ remarkably from the Malay races. They are much more impulsive, and do not conceal their emotions and passions. They are inquisitive, talk much and loudly, and laugh boisterously, reminding one of the Negro character as much as of the Negro form and aspect.

Gilolo or *Halmahera* is one of the Molucca

islands. Its north end is in about lat. $2^{\circ} 23' N.$ It lies between lat. $0^{\circ} 50' S.$ and $3^{\circ} 10' N.$, and is in length 220 miles. Like Celebes, it consists of four peninsulas, separated from each other by a deep bay. Its area is 6500 square miles. Tidore, which was discovered by Magellan, and taken into the possession of the Portuguese in 1527, and by the Dutch in 1607, as also Ternate Island, are on the west coast of Gilolo. Gilolo has a long mountainous coast; high bold land, with three remarkable peaks. The *Negro indigenes* called *Alfuro* live in the north of the island. They are an industrious and enterprising race, cultivating rice and vegetables, and indefatigable in their search after game, fish, trepang, pearls, and tortoise-shell. They are radically distinct from all the Malay race. Their stature, their features, as well as their dispositions and habits, are almost the same as those of the Papuan. Their hair is semi-Papuan, neither straight, smooth, and glossy like all true Malays, nor so frizzly and woolly as the perfect Papuan type, but always crisp, waved, and rough, such as often occurs among the true Papuans, but never among the Malays. Their colour alone is often exactly that of the Malay, or even lighter. Of course there has been intermixture, and individuals are seen whom it is difficult to classify, but in most cases the large somewhat aquiline nose with elongated apex, the tall stature, the waved hair, bearded face, and hairy body, as well as the less reserved manner and louder voice, unmistakably proclaim the Papuan type. Here is the exact boundary between the Malay and Papuan race. It is only in the Northern Peninsula that these Papuan indigenes exist, the whole of the rest of the island, with Batchian and the other islands westward, being exclusively inhabited by Malay tribes like those of Ternate and Tidore. This would seem to indicate that the *Alfuro* are a comparatively recent immigration, and that they have come from the north or east, perhaps from some of the islands of the Pacific, though it is difficult to understand why so many fertile islands should possess no indigenes. It has, indeed, been stated that Obi, Batchian, and the three Southern Peninsulas of Gilolo possess no true indigenous population. The Galela race are natives of a district in the extreme north of Gilolo, but they are great wanderers over the Archipelago. They are a very fine race, remarkably energetic and industrious, of light complexion, tall and with Papuan features, coming near to the drawings and descriptions of the true Polynesians of Tahiti and Owyhee. They build large and roomy prahus, with outriggers, and settle on any coast or island they take a fancy for. They catch turtle and trepang, hunt deer and wild pigs, and dry the meat, and cut down the forest and plant rice or maize. The *Tebello* tribe is similarly described. Bikmore, however, states, seemingly erroneously, that the *Alfuro* are strictly of the Malay type, and have not the dark skin and frizzly hair of the *Alfuro* of Ceram and Buru, though representatives of that people may exist in Gilolo. The population of Gilolo is supposed to be 75,000; all but 5000 of them are under the sultan of Ternate. It has been suggested that the *Alfuro* seem to have affinities with the Tagala race of the Philippines, through the Sangir islanders.

Lombok Island is about 53 miles long and

45 miles broad, lying between lat. $8^{\circ} 12'$ and $9^{\circ} 1' S.$, and is intersected by the meridian of $116^{\circ} 15' E.$ The Bugis call it *Sassak*, which is the name by which the inhabitants designate themselves, but its proper name is *Selaparan*. It is separated from Bali by the Straits of Lombok, and from Sumbawa by the Straits of Allas. It is mountainous, well covered with wood; a volcanic peak in the N.E. corner of the island has an altitude of 11,134 feet. The island has been peopled from the neighbouring islands.

The *Sassak* are a Malay race, hardly differing from those of Malacca or Borneo. They had been converted to Muhammadanism, but the island was conquered by the Balinese, and the ruling race are Brahmanical from Bali, and the raja of Lombok has the title of *Anak Agung*, which means son of heaven. A *Sassak* accepting Hinduism enjoys the privileges of the Balinese, and is exempt from taxation. An extensive commerce is carried on with all the Malay islands, particularly with Java and Borneo. The people frequently do a-mok, and it seems to be deliberately done. On one occasion, a person doing a-mok killed seventeen people before he could be killed. In war, a whole regiment will agree to a-mok, and then run on with such desperate resolution as to be very formidable to men less excited than themselves.

The men are strict with their wives; infidelity is punished by the couple being tied back to back and thrown into the sea, where crocodiles devour the bodies. Even a married woman accepting a flower or betel from a stranger has been punished by death with the kris; and any one found without leave within the grounds of a house is krissed, and his body thrown out to the street. The people of Lombok believe that some men can turn themselves into crocodiles, which transformation they adopt in order to devour their enemies.

Sumbawa, a large mountainous island, 160 miles E. to W. and 20 miles broad, with an area of about 3200 square miles, separated on the W. from Lombok by the Strait of Allas, and by the Supia Strait on the east from Flores and Commodo. It has six native states,—Sumbawa, Bhima, Dampo, Tomboro, Sangar, Pekat, under the supremacy of Netherlands India. It produces wax, birds' nests, sulphur, pearls, gold-dust, tobacco, horses, rice, timber, sandal-wood. The (fire mountain) *Gunong Api* is at the N.E. end of Bhima harbour. In Sumbawa, in 1815, 12,000 people were destroyed by the great eruption of Tomboro. Three languages are current in this island, one of them spoken by the people of Bhima. Their alphabet, once distinct, has been displaced by that of the Celebes.

Ceram Island, next to Celebes, is the largest island of the Moluccas. It is situated between lat. 3° and $4^{\circ} S.$ on the meridian of $130^{\circ} E.$, and is 180 miles long, but its greatest breadth is only 42 miles. The island is one long mountain chain that sets off transverse spurs, and some of the peaks are 5000 or 6000 feet in height, all of them sending down innumerable streams to the sea. The vegetation is everywhere luxuriant, and the trees gigantic. The northern peninsula of Gilolo, and the great island of Ceram, are inhabited by tall and well-made people, with Papuan features and curly hair. They are bearded and hairy limbed, but they are quite as light in colour as

the Malays. They are an industrious and enterprising race. The people of Ceram approach nearer to the Papuan type than those of Gilolo. They are darker in colour, and a number of them have the frizzly Papuan hair; their features are harsh and prominent, and the women are far less engaging than those of the Malay race. The Papua or Alfuro man of Ceram gathers his frizzly hair into a flat circular knot over the left temple, and places cylinders of wood, as thick as one's fingers and coloured red at the ends, in the lobes of the ears. They go almost naked, but armlets and anklets of woven grass or of silver, with necklaces of beads or small fruits, complete their attire. The women have similar ornaments, but wear their hair loose. All are tall, with a dark-brown skin, and well-marked Papuan physiognomy. Ceram has on its western side the three islands Bonoa, Kelang, and Manipa. The commercial products from these islands consist of tortoise-shell, mother-of-pearl, beche-de-mer, wild cinnamon, wild nutmegs, and birds of paradise. Of 28 words of the language of Ceram, nine of the words are Malay, two Javanese, and 17 are common to these two languages.

Goram is a group of three islands at Manowolko, east of Ceram; a slight infusion of Papuan on a mixture of Malay and Bugi has produced a good-looking people. The *Goram* people are wholly traders; every year they visit the Tenimber, Ki, and Aru islands, the whole N.W. coast of N. Guinea, from Oetanata to Salwatty, and the islands of Waigiou and Mysol. They also extend their voyages to Tidore, Ternate, Banda, and Amboyna. Their trade is in trepang, medicinal Mussoi bark, wild nutmegs, and tortoise-shell, which they sell to the Bugi traders at Ceram Laut and Aru. Their prahus are all built by the Ki islanders, who annually turn out hundreds of neat boats.

S.E. of *Goram* is a high group composed of raised coral reefs 300 or 400 feet, with a volcano on the island of Teor, which broke forth in 1659.

Sangir and *Siau* Islands are two groups between Celebes and the Philippines. The inhabitants resemble the people of Menado, whom Mr. Wallace (ii. pp. 292-95) describes as Negrito. Christianity has made progress among the *Sangir* islands, the Christian population in the middle of the 19th century having been 20,000. There are several extinct volcanoes, and some still in full action, in the *Sangir* group; the devastations which they have caused from time to time have been disastrous to the inhabitants. The eruption of Duwana, in 1808, completely annihilated the village of Tagalando, destroyed all the surrounding forests, and suddenly deprived the inhabitants of all means of livelihood, by the destruction of their fields. The *Gunong Api* causes numerous ravages in the island of *Siau*; its peak, 6000 feet above the level of the sea, forms the culminating point of this group. *Gunong Api* covers with its base all the northern part of *Sangir-besar*; this volcano was active in 1812, when the torrents of lava destroyed the extensive forests of coconut trees with which this part of the island was covered, and caused the death of many of the inhabitants. These islands furnish more than 25 kinds of wood suited for building and furniture. Two harbours, sheltered from all winds, exist in the larger *Sangir*, one in the Bay

of Taruna, the other called *Midelu* on the eastern side.

Floris or *Flores* is an extensive island of the Archipelago, 201 miles long from E. to W., and from 34 to 45 miles broad. It was so named from the Portuguese word *Flor*, a flower, but is called *Ende* and *Mangerye*, from its chief south and west ports. It is in lat. 8° and 9° S., and in long. 123° E. The inland parts are very mountainous and woody, and it contains several active volcanoes of considerable height. The Portuguese early visited and named this island, but they do not appear ever to have settled on it, and in 1812 the Bugi expelled all European settlers. But on the east of the island many profess Christianity, and hoist the Portuguese flag. Its chief trade at *Ende* is with *Sumba* or *Sandal-wood Island*; the *Mangerye* port trades with the Bugi and Malay. According to the statements of Bugi traders who had settled in *Flores*, that island is inhabited by six different tribes or races speaking as many different languages, the *Ende*, the *Mangarai*, the *Kio*, the *Roka* or *Rakka*, the *Konga*, and the *Galeteng*, names derived from the principal places of their residence. The coast is occupied by the Malay or brown race, but in the interior is a people with frizzled hair, and a similar frizzled-hair people live in the mountainous parts of *Solor*, *Pintar*, *Lomboka*, and *Ombay*. On the south coast is the *Rakka* or *Roka* tribe, who are reported to be cannibals, accustomed to eat their enemies and their own relatives who die. Captain Keppel says that the natives captured from the island used to be much esteemed by the Celebes pirates as slaves.

Solor island is about 70 miles in circumference, lying south of Celebes. Its N.E. extremity is in lat. 8° 26' S., and long. 123° 10' E., and it is separated from *Flores* by the straits of that name. The mountaineers appear to be the original inhabitants. Up to 1837 they were perfectly savage, subsisting on and bartering forest products with the coast tribes. The latter are said to be of the Malay race, are called by Moor the *Baju Laut* or *Orang Laut*, are remarkable for their skill in managing their prahus and canoes, and are the most expert fishermen in these seas, frequently capturing the black fish, a small variety of the cachalot or sperm whale, which no other fishermen in these seas will venture to attack. The blubber or fat obtained from them is used as food, and also as an article of barter with the inland inhabitants; and the oil and spermaceti is sometimes disposed of to the Bugi and Macassar traders, who prefer it to coconut oil for burning in their prahus. Several *Solor* fishermen are always to be found at Coupang, the Dutch settlement on Timor, chiefly in the service of the Netherland Government, from whom they obtain a fixed allowance of rice and maize. These are relieved by others every year, in compliance with an old treaty, by which the coast natives of *Solor* agreed to furnish an annual quota of men for the public service. As all the youths have to take their turn, the system makes them accustomed to intercourse with Europeans. Their religion is Muhammadan, but many on the north coast have been converted to Christianity.

The neighbouring islands of *Sebrao*, *Pantar* or *Alao*, *Ombay*, and *Wetter* are inhabited by the same race as the mountaineers of *Solor*, and are

said to be cannibals (Moor, p. 11), constantly on the watch to surprise the unwary.

Timor is the most southerly and the largest of the Molucca Islands, extending from lat. $8^{\circ} 21'$ to $10^{\circ} 23'$ S., and long. $123^{\circ} 30'$ to $127^{\circ} 15'$ E.; it is about 300 miles long and 60 broad, and has high undulating mountains in the interior. Timor seems to form the N.E. end of the great range of volcanic islands, which extends N.E. and S.W. from Timor to Sumatra. It has only one active volcano, Timor Peak, near the centre of the island, which was blown up during an eruption in 1638, and has since been quiescent. Earthquakes occasionally recur. Timor means the east. The Portuguese settlement of Dieli or Dieli is in lat. $8^{\circ} 34'$ S., and long. $125^{\circ} 40'$ E., and on the north side of the island. Koepang or Coupang, in the west end of the island, is the chief Dutch town. These two nations claim between them the entire sovereignty of the island. The coast is largely occupied by Malays and Chinese, but in the interior are tribes much nearer to the true Papuan than those of the Moluccas. The Timorese are dusky-brown or blackish, with bushy frizzled hair, and the long Papuan nose. They are of medium height and of rather slender figures, are constantly at war with each other, but they are not very courageous or bloodthirsty. In their excitable disposition, loud voices, and fearless demeanour, the Timorese closely resemble the Papuan people of New Guinea. In the islands west of Timor, as far as Sumba or Sandal-wood Island and Flores, a very similar race is found, which also extends eastward to Timor Laut, where the true Papuan race begins to appear. The inhabitants of the south-western part of Timor, in the neighbourhood of Coupang, are an exceedingly dark, coarse-haired people, and travellers have found difficulty in coming to a conclusion as to whether they belong to Malayan or Papuan races, so equally balanced are their characteristics. The anonymous author of an excellent Account of Timor, Rotti, Savu, Solor, etc., in Moor's Notices of the Indian Archipelago, says the natives are generally of a very dark colour, with frizzled, bushy hair, but less inclining to the Papuans than the natives of Ende (or the island of Flores). They are below the middle size, and rather slight in figure. In countenance they more nearly resemble the South Sea Islanders than any of the Malay tribes. The S.E. coast of Timor near Mount Allas is, according to Bickmore, occupied by the Papuan race with frizzled hair in tufts on the head. Mr. Earl says that the short tufted hair of the mountain Papuan is found in Timor, and it is possible that the races are there mixing, as its position is next to Papua. There are Malays and Chinese, but the native Timorese preponderate; they have nothing in common with the Malays, and are closely allied to the true Papuans of the Aru Islands and New Guinea. The women talk to each other and to the men with loud voices, and with a self-assertion quite different from Malay women. The mountaineers of Timor are of Papuan type, have rather slender forms, bushy frizzled hair, the skin of a dusky-brown colour, and have a long, somewhat aquiline nose, with the overhanging apex, which is so characteristic of the Papuan, and so absolutely unknown among races of Malayan origin on the coast. There has

been an admixture of Malay, and the coast occupants have wavy, not frizzled hair, a lower stature, with less prominent features, and the houses are built from the ground. The houses of the Papuan mountaineers are raised on posts. The dead of the Papuan Timorese are laid on a stage six or eight feet above the ground, sometimes open, sometimes covered, and are retained there till money for a feast can be obtained, when they are burned. The 'Pomali,' exactly resembling the taboo of the Pacific, is in full operation here, and a few palm leaves stuck outside of a garden will preserve it from any thief.

The land mammals in Timor are only seven in number.—*Macacus cynomolgus*, common all over the Indo-Malayan Archipelago; *Paradoxurus fasciatus*, a civet cat; *Felis megalotis*, a tiger cat; *Cervus Timorensis*; *Sorex teais*; and *Cuscus orientalis*.

Semao Island is near Timor. The natives of this place have been named by Mr. Crawford of the Negro-Malayan race. The people are like those of Timor, with frizzly or wavy hair and a coppery-brown colour. Semao Island has abundance of monkeys, one of them, the *Macacus cynomolgus*, or hare-lipped monkey, which is found all over the western islands of the Archipelago.

Rotti Island lies off the S.W. end of Timor. It is about 60 miles long and 38 miles broad, and is in lat. $10^{\circ} 53'$ S., and long. $123^{\circ} 5'$ E. It is a succession of low hills and narrow valleys, the soil is stony but fertile. In the early part of the 19th century it had 18 rajas over as many districts, who could bring 10,000 fighting-men into the field, sometimes opposing, sometimes aiding the Dutch, but always at enmity with the Timor raja. The inhabitants are below the middle height, and are considerably darker than the people of Celebes, but are remarkable for having long lank hair, whilst nearly the whole of the inhabitants of the surrounding islands have frizzled hair. Their features are more prominent, and they bear a stronger resemblance to the natives of India than to those of the eastern islands. The women are much fairer than the men, and many of them have very pleasing countenances. They are a mild-tempered people, and not of jealous disposition; polygamy and divorce are allowed. Their religion and belief in auguries are nearly the same as in Timor. They inter their dead under their houses, which, as in Celebes, are always raised several feet from the ground, whilst those of Timor are always built on the ground. Their language has many words in use in Timor, but the natives of the two islands do not understand each other. The slave trade up to the early part of the 19th century was carried to a great length in this island, several hundred slaves having been exported to Batavia, Amboyna, and other Dutch settlements in the course of one year.

Ansus Island is Papuan. The houses, built on posts, are placed entirely in the water. At very low water only is the beach partially uncovered. This beach consists of mud, in which mangroves grow luxuriantly, and completely obstruct a landing. The gardens, from this cause, are situated on the surrounding islands, principally on an island with a high beach lying opposite to the kampong. The Ansus Papuans' hair is in tufts. Their appearance is good-natured, faces regular, eyes 'beautifully black, the mouth broad, with

beautiful regular teeth, and the forehead high but narrow. Many have thin lips and finely curved noses, which give them a more European physiognomy. The men are generally handsome and well formed, stout, without being too thick, strong and muscular; the women very good looking; and some children with very regular soft faces and long pendent curling hair.

Bo Island is inhabited by a mixed race of Papuans and the brown race.

New Guinea is known to the Malays as the *Tanna Papua*. Its approximate area is 275,000 square miles, and it is, after Australia and Borneo, the largest island of Australasia. It is essentially the Papua land, its people being partly of the diminutive and partly of the stalwart Negro race. The island was discovered in 1525-26 by the Portuguese, and up to the present time its coasts and seas have often been visited by ethnologists, surveyors, and Christian missionaries; but the sickly nature of the climate, and the repellent character of the Papuans, have prevented investigation.

Captain Moresby says the coast north of Torres Straits, as far east as Yule Island, appears to be occupied by the black Papuan race, naked and hostile. It is an unbroken level of swampy, mangrove-covered ground, and probably malarious; its shores have no protecting barrier reef.

He speaks of the fierce and bloody nature of the black Papuans of West New Guinea. But he also mentions that from Red Scar-Head to the extreme east of New Guinea, the coast is peopled by a mild Malayan race of inoffensive manners. Red Scar-Head is 35 miles east of Yule Island; outside from 4 to 10 miles from the shore is a great barrier reef. Some of their houses are 30 to 40 feet long. They are a small, lithe, copper-coloured people, with clean, well-cut features and a pleasing expression of countenance. They wear their hair frizzled out, mop fashion, and are tattooed with stars and small figures on the breast and shoulders. They wear a leaf girdle; the young men have cowrie shell ornaments on the legs and arms, and plumes of paradise birds on the head. The cartilage of the nose is pierced, and bits of bamboo or shells inserted. According to the same author, in Robert Hall Sound the people are of the Malay type, shorter, coarser in feature, and thick lipped, almost beardless. They have high cheekbones, like the Malay, but their noses are well formed and inclined to be aquiline. Their eyes are dark and beautiful, with good eyebrows. The men's hair is frizzled into a mop form, but that of the women is cut short, and their bodies are tattooed with graceful patterns. The men do not tattoo. Their race joins the black Papuan in the vicinity of Cape Possession; but Captain Moresby also says both races were present at Robert Hall Sound, and the natives varied in stature and cast of feature.

Dori harbour or bay is formed by a long, low promontory, curving round towards the Arfak range, which rises abruptly from the opposite side of the bay. Towards the extremity of this promontory is situated the village of Dori, and opposite, at about a mile, is the inhabited island of Mansinam, and a smaller one uninhabited. The inhabitants of Dori build their houses at or below low-water mark, raised on posts, and reached by

a rough and tottering causeway from the beach. The natives of the interior do not differ perceptibly in physical character, but have a distinct language, and are called Arfaki by the Dori people. Their houses are very similar, but are raised 12 or 15 feet high, on a perfect forest of thin poles, a few of which are put diagonally, and prevent the whole from falling with the first wind. The people of Dori are fishers and traders, the Arfaki are agriculturists. The former catch turtle and trepang, which they sell for beads, knives, and cloth, and purchase of the Arfaki their rice and yams, plantains, and bread-fruits, and numbers of tame cockatoos and lorries, which they sell again to the Ternate and Tidore traders. All these natives have the characters of the Papuan race very strongly marked,—the flat forehead, heavy brows, and large nose, with the apex bent downwards, are almost universal, as well as the harsh curly hair, which often forms an enormous stiff mop, and is then highly esteemed. It has, in fact, a very grand and imposing effect. The colour of the skin varies greatly. In general it is a dirty black or sooty colour, but varies to a fine brown, which is often quite as light as that of the pure Malay races. The natives of Dori possess the rude artistic genius of the Oceanic tribes, decorating their household utensils and the prows of their canoes with elaborate carving, and the posts of their council-house with obscene caryotides. The language of the Dori people resembles that of the Aru and Ki Islands in containing a large number of monosyllabic words, as well as others excessively polysyllabic, offering a remarkable contrast to the striking dissyllabic character of the whole Malayan group of languages.

Papuans of Sorong, on the N.W. coast of New Guinea, are said to drink the blood which drops from a newly-cut-off head of an enemy killed in war, provided he had been a man of valour; they believe thus to imbibe his courage.

The Papuan idols called Karwar are the effigies of the distinguished men. They are similar to the Tikki of the Maori and other wooden figures of the Polynesians.

Brumer.—The women of Brumer Island, on the south coast of New Guinea, are tattooed on the face, arms, and front of the body, but generally not on the back, in vertical stripes less than an inch apart, and connected by zigzag markings. On the face these are more complicated, and on the forearm and wrist they are frequently so elaborate as to resemble lacework. The men are more rarely tattooed, and then only with a few lines or stars on the right breast. Sometimes, however, the markings consist of a double series of large stars and dots stretching from the shoulder to the pit of the stomach.

Warrior Island is in Torres Straits. The men are powerful, are armed with six-foot bows; their war canoes are 50 and 60 feet long.

Aiou or *Yowl* is a group of islands situated about 70 miles W.N.W. from the Cape of Good Hope, on the W. coast of New Guinea, and 30 miles N.E. from the island of Waigiou in the Gilolo Passage. The group consists of circular low isles, 16 in number. The largest lies in about lat. 0° 25' N., and long. 131° E. The group is surrounded by an extensive coral reef, nearly a degree in circumference, the south-western portion

of which is separated from the main reef by a narrow but deep channel. Aiou Baba, the largest of the group, lies on this detached portion of the reef, and is about 7 miles round, and 500 feet in elevation. The north-eastern or larger reef, which contains the islands of Abdon and Konibar, with several coral islets, is said to have an opening on the N.W. side which admits large vessels within the reef. The inhabitants are Papuans, are few in number, and occupy themselves almost exclusively in fishing and in catching turtle, with which the lagoons within the reef abound. The chief exports are tortoise-shell of good quality, which is obtained here in large quantities, and trepang. These are purchased by Chinese from Ternate, the king of which place assumes supreme authority over all those parts of the coast of New Guinea which his subjects have been in the habit of visiting for purposes of trade. The traders to Aiou all employ small vessels, which alone are adapted for going within the reef of Aiou Baba, their chief resort. They bring red and white calicoes, thick brass wire, old clothes, glass beads, and all sorts of ornamental finery which the Negroes of New Guinea delight in as much as those of Africa. The natives are tolerably friendly to strangers, but must not be trusted too much, as they are inclined to be treacherous and revengeful, which is the case, indeed, with all the Papuan tribes.

Modera is about 25 miles in length, lying to the N.N.E. of the Great Ki, distant about 60 miles, and is the south-westernmost of a group of high islands, which until lately were considered as forming a part of New Guinea. The inhabitants are Papuans, and do not bear a high character among their neighbours. Wild nutmegs, trepang, and tortoise-shell are obtained here. Red calico, parang or chopping knives, coarse cotton shawls and handkerchiefs, with iron, Java tobacco, muskets, and gunpowder, are the principal articles in demand. The chief traffic was in slaves, which are distributed among the neighbouring islands of the Archipelago, and are sometimes carried as far as Bali and Celebes.

Waigiou Island lies between New Guinea and Gilolo. Its inhabitants are Negroes, with features more regular, an expression of countenance more agreeable, and complexion less black, than the Negroes of New Ireland. Their persons are delicate and slender, and their stature short. The hair differs in texture among individuals, some having it woolly like the African Negroes, some lank like the European, and others again of a texture between the two. The highest facial angle was 69° , and the lowest from 63° to 64° . *Paradisæa rubra*, the rare red paradise bird, and *Ptilonopus pulchellus*, a lovely little dove, occur here.

Gebe Island is between New Guinea and Gilolo. It is occupied by the Negro race, with nose flat, the lips thick and projecting, the complexion a dark olive, the eyes deep seated, and on an average the facial angle 77° , but as high as 81° . In Gebe, Waigiou, and in some parts also of the coast of New Guinea, the Malayan race may have become intermixed with the Negro, as the complexion is lighter and the peculiar texture of the Negro hair altered or obliterated. The language spoken at Waigiou is entirely Papuan, being that which is used on all the coasts of

Mysol, Salwatty, the N.W. of Guinea, and the islands in the Great Geelvink Bay. Waigiou, Gebe, Poppa, Obi, Batchian between New Guinea, and the Moluccas, as well as the south and east peninsulas of Gilolo, possess no original tribes, but are inhabited by people who are evidently mongrels and wanderers.

Arroe or *Aru Islands* extend from lat. 7° to lat. $5^{\circ} 52' S.$, and in long. $133^{\circ} 56' E.$, run for upwards of 100 miles N. and S., and between 40 and 50 miles in breadth. They lie between the Timor Laut group and the S.W. coast of New Guinea, distant about 60 miles. They are a closely-packed group. Some of the southern islands are of considerable extent, but those to the north, lying close to the edge of the bank, are rarely more than 5 or 6 miles in circumference. The land is low, being only a few feet above the level of the sea, except in spots where patches of rock rise to the height of 20 feet, but the lofty trees which cover the face of the country give to it the appearance of being much more elevated. Coral reefs extend from the shores of all the islands, and in the eastern parts of the group these are often of great extent. The Aru islanders have had much intercourse with strangers. They purchased from the Bugis the Papuan slaves brought from New Guinea, who were employed in diving for pearls and in the beche-de-mer fishery. The Aru islanders are excessive in their use of intoxicating liquors, imported from Java and Macassar. In personal appearance the people are between the Malayan and Polynesian Negro. In stature they surpass the civilised natives of Celebes. The dress of the men is a piece of matting or cloth girdled round the loins, and drawn tight between the thighs, and a salendan or shawl. No fillet is worn round the head. The hair is woolly and frizzled out like that of the Papuan. The men are jealous, and easily roused to anger by abuse of their women or ancestors; otherwise they are of mild disposition. Christianity was introduced into the Aru Islands many years ago by the Dutch of Amboyna, and nearly all the principal people profess this creed, but some are Muhammadana. The Aru islanders bear a strong personal resemblance to the aborigines of Port Essington; indeed, on several occasions in which natives from the neighbourhood of the late settlement visited the islands in European vessels, they were considered by the Aruans as belonging to some remote part of their own group. But the Aruans also possess many characteristics in common with the Outanata of the opposite coast of New Guinea. One of their most singular peculiarities, however, consists in the value which they attach to elephants' tusks, brass gongs and trays (*dulam*, *talam*), and huge porcelain dishes. A man's goods on his death, all the chattels which he has collected during his life, including tusks, gongs, and precious china dishes, are broken in pieces and thrown away; and in the villages may be seen heaps of these fragments of property which custom or some singular superstition has deterred the living from appropriating. The natives are Papuans, with black or sooty-brown skins, woolly or frizzly hair, thick-ridged prominent noses, and rather slender limbs; most of them wear nothing but a waist-cloth. The Papuan talks, laughs, shouts without intermission. Papuan boys sing cheerily as they walk along, or talk

aloud to themselves, which is quite a Negro peculiarity. They have as food, sago, vegetables, fish, and molluscs; and tobacco, betel, and arrack are their luxuries. Their houses are rude sheds. There are some mixed races amongst them. The women have only a mat of plaited strips of palm leaves worn tight round the body, and each hanging from the hips to the knee, or suspend a mat in front and one behind. Their frizzly hair is tied in a bunch at the back of the head. They delight in combing it or forking it, using a large wooden fork with four diverging prongs, to separate and arrange the long, tangled, frizzly mass. They and the men wear ear-rings, necklaces of silver, brass, shell. The Aru Papuans told Mr. Wallace that some of their tribes kill the old men and women when they can no longer work, but he saw many old folk. Their hair is usually black, and strongly curled. Like the African Somali, they wash it with wood-ashes or lime-water, which impart to it a lightish colour, and cause it to appear rough, both these peculiarities being considered very tasteful by the Alfoer as well as by the Papuans. The usual height of the men is from 5 feet 4 inches to 5 feet 8 inches, and there is a great inclination to slimmness about the lower extremities among the taller men, some of whom attain the height of 6 feet.

The *Baju* or *Baju Laut*, meaning the Sea Baju, are a maritime people in the Aru Islands, who venture far to sea. Many of the Baju remain throughout the year near the Dutch Settlement of Macassar, on the south end of Celebes, where they are found very useful in carrying despatches. They are chiefly employed by the Chinese in fishing for trepan or sea-slug, and, according to the policy invariably adopted by the latter in their dealings with the natives, are generally involved in debt, from which extrication is nearly hopeless. The demand against each boat or family usually averages about four hundred guilders (twenty-five pounds sterling), and, extraordinary as it may appear, no instance is on record of their ever having absconded to avoid the payment of their debts. About Sulu and the circumjacent islands, the Baju Laut are the most industrious and useful race, and to them Sulu is indebted for bringing its submarine wealth. A hundred sail of ten to twenty tons burden have been seen at one time at Bontian under Dutch colours. They are a different race from the Orang Laut of the Malay Peninsula and the Straits of Malacca. They are the Orang Solok of the east of Subanas and Lutas. They speak the language of Sulu, and profess Muhammadanism.

The *Kei Group* of ten islands adjoins the Aru Islands. Ke, Kei, or Ki is prefixed to the names of all their villages. The Great Ki is about the size of Tanakeka, an island near Macassar. The Ki group form the northern of the south-easterly islands. The natives are industrious, and great boat-builders. The islands, covered with luxuriant forests, are occupied by two races, one of them the Papuan, who make coconut oil, build boats, and make wooden bowls; their boats are from small planked canoes to prahus of 20 to 30 tons burden. They build the skin first and fit on the knees and bends and ribs. Money is not used, but every transaction is in kind. The Papuan wears a waist-cloth of cotton or bark. The Papuan women of Ki are not secluded, the children are

merry, noisy, and have the Nigger grin, and amongst the men is a noisy confusion of tongues and excitement on every occasion. The other race are Muhammadans who were driven out of Banda, and wear cotton clothing. They are probably a brown race, more allied to Malays, but their mixed descendants have great varieties of hair, colour, and features, graduating between the Malay and Papuan tribes. The men profess Muhammadanism, but eat hog's flesh. The islands produce Maratigo and Banyaro woods, well adapted for masts.

Carpophaga concinna occurs in the Ki and in Banda, where it is called the nutmeg pigeon. *Cyphogastra calepyga*, a beautiful species of the Buprestidae, occurs here; also the butterfly *Orchis*, *Phalaenopsis grandiflora*, two large beetles, *Therates labiata* and *Tricondyla aptera*. *T. labiata* is ever on the watch, and from time to time emits an odour like otto of roses. *Tricondyla aptera* of the Malay Islands resembles a large ant, more than an inch long, and of a purple-black colour. It is wingless.

The PHILIPPINE ISLANDS were discovered in 1521 by Magellan, and they were named after Philip II. of Spain. There are ten principal islands, 400 of medium size, and 800 islets, running 900 miles from north to south, and 500 miles from east to west, from lat. 5° 40' to 18° 47' N., and between the meridians of 120° and 125° E.

The larger islands are traversed by chains of lofty mountains, in which are active volcanoes, amongst others, Dabao in Mindanao, Albay and Taalen in Luzon. Earthquakes recur apparently three times in a century, and hurricanes frequently sweep across the islands. The population is about four millions, in many distinct nations or tribes, speaking distinct languages unintelligible to each other. They are sometimes called the *Manillas*, and their inhabitants *Manillamen*.

Spanish territory is nearly 116,000 square miles, and population about 8 millions, and a trade exchange of 12 millions sterling. The three great outlets into the Pacific lead from the Philippines, viz. the Sulu channel, leading direct to New Guinea; the Bernardino strait opposite the Pelew and Mariana Islands, and in the north the Bashi passage, the nearest outlet from China. In 1833, the population of the principal islands was estimated—

Batanes Islands,	8,000	Mindoro,	41,190
Calamianes,	20,730	Negros,	60,980
Leytes,	91,273	Panay,	425,745
Luzon,	2,323,395	Samar,	92,730
Magindanao,	77,690	Zebu,	203,555

A writer in the Quarterly Review (No. 314 of 1884) says their southern half is tenanted by the Visayan (Bisayan), who resemble the Dyak of Borneo. Many of them have adopted Christianity. They are fond of music and gaiety.

The *Tagala* subdivisions are the Kosan, Bicol, Igorrotes, and others in the northern part of the Philippines. They are darker than the Visayan, are excellent agriculturists, ingenious artificers, and daring seamen. Chinese have married with the Tagal. The total number of Spaniards does not much exceed 5000.

The *Negrito* are believed to have been the prior occupants, and to have retired into the mountain districts before invaders. They are a black, woolly-haired race, of diminutive stature, 4 feet

6 inches to 4 feet 8 inches high, with hair like that of the Papuan and many Negroes of Africa. But of the central group of the Philippines, consisting of Panay, Negros, Samar, Leyte, Masbate, Bohol, and Zebu, only in the first two were Negrito tribes remaining, the crest of the mountain range of Negros, which extends for 120 miles throughout the length of the island, being almost exclusively occupied by scattered tribes of Negritos.

Magindanao or *Mindanao*, the most southerly island, is partly under Spain, and in part under feudatory chiefs, with Muhammadan subjects of Malay race, whose women at the age of 13 (probably on marriage) have their teeth filed thin, stripped of the enamel, and blackened. The Negrito sparsely occupy the interior. *Mindanao* people were addicted to piracy, using prahus 96 feet in length, 26 in breadth, and 8½ feet of hold, with 40 oars, 2 rudders, and a crew of 90 men. Some of their prahus are long and narrow, 50 feet long, and only 3 in breadth, but with outriggers to enable them to carry sail. They use the tripod mast, and sail with great speed.

In *Mindoro* Island, the Negrito occupy the Bengan, a mountainous district, living on friendly terms with the Manguianes, wild tribes of the brown race, by whom they are surrounded.

The principal tongues of Luçon are the Tagala, the Pampanga, the Pangasinan, and the Iloco.

The islands produce gold, sulphur, amber, pearls, tortoise-shell, mother-of-pearl, sappanwood, and ebony; and rice, cocoa, coffee, indigo, and pina fibre are grown.

Negros.—The woolly-haired tribes are more numerous in the Philippines than in any other group of the Indian Archipelago, with the exception of New Guinea. The Negrito population in 1842 was 25,000. The island on which they were first seen was named by Magellan 'Isla dos Negros,' to distinguish it from the adjacent island of Zebu, where his ships remained for some months. Negros still contains a large population of Papuans, while Zebu is altogether free from them, and no record exists of their having ever been found there. Samar and Leyte are similarly situated with Zebu, but *Mindanao* and *Mindoro* contain several tribes of Negritos, and they form the chief population of the less accessible parts in the mountain ranges of Luçon, the largest island of the Philippine group. The accounts of the Negritos given by the early Spanish navigators perfectly apply to their present condition. They are described as being smaller, more slightly built, and less dark in colour than the Negroes of Africa, and as having features less marked with the Negro characteristics, but as having woolly hair. The Indian races are in general superstitious, credulous, fond of gaming, and particularly addicted to cock-fighting. The Negrito are said to be the original inhabitants of the islands, who retired before the invading Indians. The extent of this Archipelago is 300 leagues from north to south, and 180 leagues from east to west. Its islands are traversed by a mountain range, and partially fertilized by the overflow of spacious lakes. This Archipelago received its name after Philip II. of Spain, in whose name they were finally conquered, pacified, and peopled. The Negrito of the Philippines are polytheists, but without temple or ritual. They believe in omens, invoke *Camburan* (God),

the moon and stars, and adore the rainbow after a storm. They have also a worship of ancestors, a god of the harvest, of the fisherman and hunter, and a remnant of fetishism in a grotesque native devil. Iloco is one of the languages spoken in the island of Luçon. In the Philippines are many separate nations or tribes, speaking distinct languages unintelligible to each other. The principal tongues of Luçon are the Tagala, the Pampanga, the Pangasinan, and the Iloco, spoken at present by a population of 2,250,000 people, while the Bisaya has a wide currency among the southern islands of the group, Leyte, Zebu, Negros, and Panay, containing 1,200,000 people.

Negros or *Buglas* Island extends from lat. 9° 4' to lat. 9° 50' N. Of the central group of the Philippines, consisting of Panay, Negros, Samar, Leyte, Masbate, Bohol, and Zebu, the two former are the only islands in which Negrito tribes exist to the present day, and even as regards Panay, the fact must be considered doubtful. Negros, however, contains a considerable Negrito population, the crest of the mountain range, which extends throughout the length of the island, a distance of 120 miles, being almost exclusively occupied by scattered tribes.

The **SULU ARCHIPELAGO** is that chain of islands, about 60 in number, which stretches across from the N.E. point of Borneo to the island of *Mindanao*. Sulu Island, from which the Archipelago is named, is high and of considerable extent, being 35 miles long and from 5 to 10 broad; it lies in long. 121° E., near the centre of the Archipelago. Sulu was called *Felicia* by the Spaniards. It was also called *Banjar Kulau*, *Little Banjar*, to distinguish it from *Banjar Massing* in Borneo; and the word Sulu has been surmised to be from the Chinese *Su* and *Lao*, the island of the Laos. The ruling race are Malays. The occupants were Papuans, who have been driven to the mountains by subsequent races. A people called *Orang Dampuan*, or by the Chinese *Sonpotualan*, held Sulu and all the sea-coasts for a short time. Chinese and Spaniards have several times taken and lost ground. A race is named who are called *Orang Dusun*, and another as the *Orang Sulok* or *Bisayan*. The religion of the ruling race is Muhammadanism, but part of the Papuans are pagans and part Muhammadan, and there are remains of Buddhism and Hinduism. There are Christian freemen in the interior. The Bisayan language of Luçon is in general use, but many of the people speak Malay, others Chinese, and others Spanish. Marsden mentions the existence of dictionaries of the Bisayan, Tagala, and Pampanga tongues. In the middle of the 18th century the British sent to Sulu Mr. A. Dalrymple and others on commercial missions, which led to no permanent results. The houses are, like those of the Malays, raised 4 or 5 feet from the ground, the ascent being by a ladder, which is pulled up at night. The Macassar men of Celebes determine many disputes by single combat, but never avenge themselves by personal assassination. On the contrary, the Sulu race have no idea of putting themselves on a footing with their antagonist, but always attack him in the dark, or off guard. It would scarcely be possible to scrape up a more infamous race than the Sulu. The only virtue they boast is courage, which, unaccompanied with principle, is at best

but negative, and in this instance doubtful. Honesty, industry, or hospitality are unknown to the mass of them, at least in practice, but they are distinguished by civil dissensions, treacherous assassinations, vain-boasting, theft, laziness, dirt, envy, and dissimulation, or rather unconnected falsehood.

The Sulu do not, like the Muhammadans of Hindustan, seclude their women; on the contrary, they mix in society as in Europe. The women wear a close, short baju of cotton of various colours, with kanchings on the back part of their arm; trousers (saluar) of fine white cloth or of flowered silks or kimkhabes, with two sarongs, one put on as a petticoat, the other thrown over their shoulders. They tie their hair in a bunch at the fore part of their head; wear krabows in their ears, rings on their fingers, and Chinese shoes on their feet. In their houses, however, their sole apparel is their trousers, remaining nude from the waist upwards. They arch their eyebrows with the razor, shave off the short hairs round their foreheads, and their teeth, like those of the men, are filed and stained black.

Mr. Hunt says the *Baju* of the Sulu Archipelago are really the Orang Sulok of the east of Subanos and Lutas. Authorities, however, have considered them to be from Johore, from China, from Japan, or a Bugi tribe. They speak the Bisayan language of Sulu, profess Muhammadanism, and are, as the word '*Baju*' indicates, fishermen. They made Macassar their headquarters, to escape from the oppression from which they suffered at the hands of the Datu chiefs of Sulu. The Lanun or Illanun race, from the provinces of Illano and Melana, in the island of Magindanao, long carried on piratical expeditions, making Sulu their chief headquarters and entrepot for the sale of their plunder. They moved in large fleets of small prahus in the straits of Macassar, among the Moluccas, and in the southern islands of the Philippines. During a six months' residence at Sulu, about the year 1830, Mr. Hunt heard of many ships being captured. Their twelve establishments in the Sulu dominions in his time had upwards of 8000 pirates, with prahus manned by 30 to 60. In 1851 the Governor-General of the Philippines took the fortress at Sulu, and since then Spain has been dominant over the Sultan, to whom they allow 2400 dollars per annum. In 1883 they assumed a more direct control.

FIJI group consists of numerous islands between lat. 15° 30' and 19° 30' S., and long. 177° and 178° W. They are in three divisions, an eastern, northern, and western, in a semicircle, with the base, about lat. 19° 30', in great part surrounded by coralline reefs. The population amounts to about 150,000 souls. They are of a Negroid race. Beyond the Fiji, the brown Polynesian race, or some intermediate type, extends over the Pacific. The descriptions of these latter agree exactly with the characters of the brown indigenes of Gilolo and Ceram.

AUSTRALASIA embraces Australia, Tasmania or Van Diemen's Land, New Caledonia, New Hebrides, Queen Charlotte's Islands, Solomon Archipelago, New Britain, New Zealand, and others.

AUSTRALIA lies between lat. 10° 39' and 39° 11' S., and long. 113° 5' and 153° 16' E. Its coastline is about 7750 miles, within which is an

area of three millions of square miles. The complexion of the natives is chocolate-coloured, the lips thick, teeth white and even; eyes deep set, small, and black; hair long and black, generally straight, but sometimes slightly curled; beards thick and bushy.

SANDWICH or Hawaii or Owyhee Islands group, eleven in number, were discovered in 1778 by Captain Cook, and on the 14th February 1779 he was killed on the shore of the Bay of Kealahakua, on the west side of the island of Hawaii. They lie in the N. Pacific, between lat. 18° 50' and 22° 20' N., and long. 154° 55' and 160° 15' W. Maunakea mountain, in Hawaii Island, rises to 13,953 feet above the sea. The population in 1849 was supposed to be about 80,000 souls. There has been a large influx of foreigners from Asia, America, and Europe. The inhabitants are nominally Christians. The male population are a good height, athletic, and well proportioned; but neither men nor women are prepossessing in appearance, although they have the reputation of being good tempered and not easily aroused into anger. The ruins of an old temple are still to be seen about six miles from Honolulu, near Diamond Hill. It is said to have been built by Kamehameha the First, after the conquest of the island. It is called Heiau. Here, in the days of heathenism, were offered human sacrifices. The victim was chosen either by the priest or king. The messenger of death entered his abode while he slept, and he met his end by strangling. He was then dragged off as an offering to the sanguinary god.

SAMOAN group, or Navigators' Islands, in the S. Pacific, eight in number, situated between lat. 13° 30' and 14° 30' S., and long. 168° and 173° W., were discovered in 1768 by Count de Bougainville. The population is about 60,000. The people are taller and better formed than any other of the Polynesians.

NEW ZEALAND consists of two large and several smaller islands in the Southern Pacific Ocean, between lat. 35° and 46° S., and long. 166° and 179° E. They were discovered by Tasman in 1642. The area is about 86,000 square miles. There is an active volcano in the Bay of Plenty, and many conical hillocks, seemingly extinct volcanoes. The native population is estimated at 100,000. The men are tall, well-formed, strong, athletic, and active. Many of the chiefs are upwards of six feet high. The women are likewise well formed. The eyes are black, strong, and piercing; hair black and commonly straight, but sometimes thick, bushy, and curly; that of the women fine, soft, and silky. The men who can afford it tattoo the skin. The principal chiefs and their wives wear green talc stones, called Heitiki, suspended from their necks, on which is carved a human figure sitting cross-legged. Cannibalism and infanticide were formerly very common.

LADRONES.—Two groups of islands are so designated. The group near the S. coast of China, 18 miles S.E. of Macao, in lat. 21° 57' N., and long. 113° 52' E., at the entrance of the Bay of Canton, consists of two islands. The Grand Ladrone, called by the Chinese Tyman Shan, is in lat. 20° 56' N., and long. 113° 44' E., 12 miles east of Macao, and 29 miles east of Canton factories. It is steep and bold, and 2 miles in circumference. On its west side is the Little Ladrone.

The pirates who infested the Archipelago consisted of the inhabitants of the free Muhammadan states in Sumatra, Lingin, Borneo, Magindanao, and Sulu; those natives who have remained uncontaminated by the doctrines of the Arabs never being known to engage in the like pursuits. The Europeans who were unfortunate enough to fall into their hands were generally murdered, while the natives who composed the crews of the captured vessels were sold for slaves. The term *Ladrones* is of Portuguese origin, and is applied by the Portuguese to the Chinese pirates, who commenced to gain power by the close of the 18th century.

Ladrones, also called the Marianne Islands, were the first islands seen by Magellan in 1521. From these he sailed to the Philippines, where, in the island of Mactan, near Zebu, he was killed, as also was Barbosa. Magellan's companions then visited Timor in 1522, and returned to Lisbon, making the first circumnavigation of the globe. They are a large archipelago, stretching from N. to S., from the southern extremity of China into the N. Pacific for 450 miles, between lat. 13° and 21° 35' N., and nearly under long. 145° E. The islands are 20 in number. When the Spaniards arrived, the inhabitants, in manners, government, colour, and speech resembled the Tagala of the Philippines, — a tall, robust, well-proportioned race, olive-complexioned, with well-grown beards and long black hair; both sexes stained their teeth black, and some painted their bodies red. But that race has disappeared, and only about 2000 people of foreign origin now inhabit the islands.

CHINA has an area of 11,555,764 square kilometres. Its emperor rules over 371 millions of Mongoloid races, viz. Chinese proper 350 millions, and 21 millions Tibetans, people in Formosa, Tungus, Manchu, Mongol, Kalmuk, Buriat, and Uzbek, in Manchuria, Mongolia, Tibet, Zangaria, and East Turkestan; and he claims tribute from several semi-independent states. Its dynasties have ruled through 4000 years, and the territorial distinctions—China proper and the Chinese empire—have existed from the earliest periods of their history.

Among the tributaries are those of Inner and Outer Mongolia, of Uliu-Sutai and Tsing-Hai, or Koko-Nor; and the tribes acknowledging the sway of China are classed as Inner and Outer Mongolians. Inner Mongolia lies between the desert of Gobi and the continuous frontier of Manchuria and China. The Outer Mongolians are Kalkas of different tribes. Among the tribes and remnants of tribes are the Shumet of Shan-si beyond the wall; Chahar, Bargou, Eluth, Solon, Taguri, Orunchun, Oilar, Haasack, Yu-muh, Tasang or T'sang, and Sang-tung.

The Chinese proper are of a yellow colour, but brown and sometimes a maroon tint are seen. Their face is broad and flat, the cheek-bones projecting, irides black, eyes oblique, beard scanty, stature above that of the Malay and Tibetan. They are skilful, enterprising, and self-reliant; emigrate with confidence, and are numerous in the islands of the Archipelago, the Indian Ocean, and America.

They have made many great discoveries in the arts, but they do not advance beyond a certain grade of intellectual development.

Their many millions belong to about 400 sing or clans, and those of the same sing are relatives,

descended from the same ancestor, and bound to help one another. With the nation, the idea of the family is the grand principle that serves as the basis of society, of which the emperor is the head. The poor, and all who are not well-to-do, rarely use any kind of animal food. In the midland and southern provinces, the diet consists of plain boiled rice, with a relish of pickled fish or vegetables, salted eggs, and curd made of lentils, etc. When meat can be afforded, pork is always the favourite dish, and amongst the higher classes, mutton, poultry, venison, or game; with such delicacies as *beche-de-mer*, seaweed, sharks'-fin jelly, fish, the edible swallow's nest, ducks' tongues, pigeons' and plovers' eggs. Weak tea is their great liquid. Spirits are rarely used.

Yunnan province, in the extreme S.W., is inhabited by many tribes. Amongst them, the Lolo of different clans, the Pai-yi, the Pen-ti, the Min-kyu. Also, in the mountain ranges which separate China and Burma, are the Mouso, whose women wear huge silver ornaments. To their west are the Lissu tribe, in the tract between the Lan-tsang-keang and the Lo-keang or Salwin. And in addition to these, on the borders, are the Sifan, Meau-tze, Pa-e, Ho-nhi, Khato, Lo-pé, Shen-tsen, and other tribes.

Within the borders lying in the southern and western provinces, parts of the Chinese empire,—Hu-kuang, Sze-chuen, Yunnan, Kwei-chau, and Kwang-si,—are various tribes, known as the Miao, Yau, Tung, and Keh-lau, who are reckoned by the Chinese as Miao or barbarians. Some of them in the recesses of the mountains, still unsubdued, are styled the Sang Miao; but the subdued tribes paying tribute are called Shuh-Miao. Many of the wild Miao live in Kai-li, Tai-hung, Hwang-niu, and Shi-ping.

Sifan, Kham, Miao, Tzu, Yeh, Jen Mantzu, and Ichia, in Chinese phraseology all mean various degrees of savagery or barbarity. The rude Tibetan tribes of nomade and predatory habits are chiefly known in Tibet under the generic name of Kham; it corresponds to the Sifan of China.

The Miao-tse or Miao-tse, occupying the highlands of the southern half of the Chinese empire, nearly a hundred in number, are regarded as aborigines, and are said to belong to the Thai group. They are cultivators, rear the silk-worm, forge iron, and work in other metals, are weavers, traders, fowlers, fishers, herdsmen, and some of them highly predatory.

The Kih-mang-ku-yin live in excavations made in high cliffs in the Kwang-shun-chau district. The King-kia of Li-po-hien have a festival on the last day of the tenth month, at which they sacrifice to demons. In the eleventh month, the unmarried folks have a dance, at which they choose life partners for themselves.

The Luh-ngeh-tze of the Wei-ning district, in Ta-ting, inter their dead in coffins, but after a year, and for seven successive years, re-open the graves, wash and clean the bones, and replace them.

The Lang-tze-Miao of Wei-ning follow the Couvade practice. On the birth of a child, the husband takes to bed, and is cooked for and waited on by the wife, who suckles the child and works in the fields; not till after a month does the husband go abroad. When a parent dies, so soon as life becomes extinct, they twist the head round

backwards, so that, as they say, he can see behind him.

Tungus, a general name applied to a population common to a vast area in Siberia and China. Their physiognomy connects it with the tribes of Northern Asia in general, and their language forms a transition between the monosyllabic and agglutinate forms of speech. The Tungus, under the name *Manchu*, constitute the dominant population of China itself. The tribes under Chinese rule, in Manchuria, on the watershed of the Amu, are termed *Manchu*. The *Manchu* proper have a literature, with an alphabet modified from the Mongol. They are agricultural and industrial. They conquered China in 1644, and founded a dynasty. The Tungus on the shores of Okotsk call themselves *Lamut*, from *Lamu*, the sea. Some Tungus call themselves *Boji* or men, others *Donki* or people.

The *Mongol*, properly *Mang-ku*, have four branches, viz. the Eastern Mongol, the *Kalmuk*, the *Buriat*, and the *Hazara* or *Aimaq*. Originally the Eastern Mongol got from the Chinese the nickname of *Ta Ta*, but since the 8th century they have been called *Mang-ku* (*Mongol*). They inhabit the eastern half of Gobi, and are divided into the two borders, the *Schara* towards the south, and the *Kalka*, their northern neighbours.

The Chinese are now spreading through the Archipelago, east of Asia, and America. The immigrants evince great physical strength and endurance, much intellectual energy and perseverance. They have great power of organization, and give each other mutual assistance and support. Wherever bodily strength and manual dexterity have to be combined, the Chinese in the east of Asia have no equal, and they are seen wherever mines have to be worked, new agricultural products introduced, or factories erected and put to use; expert in all artisan and handicraft work. While the British and German settlers refuse to marry the native women with whom they associate, and leave the offspring in bastardy, the Chinese invariably raises his Burmese, Cambodian, Malay, or Siamese helpmate to the full rank of wife, treats and honours her as such, and bestows on her children all the advantages to be conferred by acknowledged legitimacy, backed by strong parental affection.

There are three prominent philosophies in China, following the views of *Kung-tszc* (Confucius), of *Laou-tszc*, whose religion is known as the *Taou*, and the Buddhists who adhere to the teachings of *Sakya*. The doctrines of Confucius are based on the moral consciousness of right and wrong, which he believed to be inherent in all men. The *Taouist* morality is based on the *Kan-yong-pcen*, or book of retribution, in which it is inculcated that the punishments of sin and rewards of good doing fall in this life. *Sakya's* followers teach a strictly moral code, but in Tibet there is a hierarchy which exercises political power. The *Woo-wei-kaou* is a sect of China. *Muhammadanism* and Christianity have made progress. In the state religion there are sacrifices to the heavens (*Teen*), to *Te*, the earth, and to *Tae-meau*, the great temple of ancestors; and education of the people is regarded as essential to the welfare of the state. Women are rarely educated. Marriage is universal; polygamy is allowed. Infanticide and sale of children are practised.

FORMOSA, called *Tai-wan* by the Chinese, is a large island in the China Sea, separated from China by a stormy strait, 80 or 90 miles wide. It stretches as far north as lat. 25° N., and this is the most northerly limit of the Malay language, Malay words being found in the language of the aborigines, and the inhabitants of the interior, who are supposed to be of Malay origin, are in several groups, each speaking a dialect of their own. On the easterly side of the island is a belt of level land near the sea, but it is rugged and mountainous in the interior. The Chinese occupied it about A.D. 1430. The Dutch took possession of it in A.D. 1634, but were dispossessed by a Chinese adventurer in 1661, though a small body of men claim to be their descendants. The Chinese colonies are mostly on the N. coast. The central and southern districts are inhabited by the aborigines. The Formosa tribes are *Favorlong*, *Jakih*, *Peppukwan* or *Peppohuan*, *Sideia*, *Tilloi*, *Yukan*.

The barbarian tribes worship a good and evil spirit, with women priestesses termed *Inib*. They are fond of out-of-door merry-makings, and during the annual nine days' festival, they drink and play and give themselves up to sensual pleasures. Marriage of men is not allowed until they be 21 years of age. Libations to the earth and sky are poured out, and they are married, but the wife remains in her father's house, and until the husband reach the age of 40, he can only visit the wife by stealth at night, and daylight sees the signal for his quitting it. It is said that divorces are very frequent, and children born before the mother is 37 years of age are allowed to live.

The *Peppohuan* race of this island are descendants of the savage tribes who inhabited the plain country, and, being conquered by the Chinese, have mixed with them to a great extent. They are a promising race, and accept Christianity readily. The Chinese residents prefer *Peppohuan* women for wives, being finer and stronger women, prettier and more useful, than those of the Chinese. The savage tribes of Formosa tattoo their faces; the men wear a tunic of coarse grass-cloth, and the 'fighting women' a tunic and a short petticoat or piece of grass-cloth. Their huts are neatly built of bamboo and palm leaves. Over some of the doors are seen rows of the skulls of wild animals, the deer, the boar, the monkey; and one of them displayed the tails of six Chinamen tied up in a bunch, which he said had belonged to men he had killed.

COREA or *Korea* the *Manchu* call *Solgo*; *Kao-li* is the Chinese name. Its area has been stated at 236,784 square kilometres, and its population at from 7½ to 15 millions. The people use rice, barley meal, and flour of millet. The Koreans were driven out of East Tartary into the peninsula which they now occupy. Their country was subsequently invaded by the Mongols, on which occasion the *Siogour* *Yoritomo* defeated *Kablai Khan*. They have since been conquered by the Japanese. Its people are supposed to be a mixed race, descendants from Tartars, Chinese, and Japanese. They have flat faces, oblique eyes, broad cheek-bones, strong black hair, and scanty beard; they are strongly made, their skin varies from tawny or yellow to brown, wheat, or straw colour, and reddish-yellow. They have a mixture of the Chinese and Japanese physical features. Their religion is Buddhist; their alphabet and language differ from the Chinese.

JAPAN and its dependencies (the Kuriles, Loo-Choo, and Benin Islands) are in area 382,447 square kilometres, and population 36,357,312. The Japanese are a short-statured Mongoloid race, intelligent and progressive, ruled over by an emperor. The Aino were the aborigines of the Japanese islands, but only a remnant of them now exist in the island of Yezo. The Aino, the Ghiliak, and Yenesei Ostiak respect the bear. The true Ostiak hang the skin on a tree, pay it homage, and beg the animal's pardon for having killed it. They also swear by the bear. Their severe treatment by the Japanese has led them to other countries. They occupy the southern part of the island of Saghalin, which is in possession of the Japanese. The Aino are of short stature, with broad faces of the Mongol type. They are a timid race, their limbs are hairy; they have bushy beards and long tangled hair, large heads and clumsy figures; the expression of their faces is that of good-nature combined with stupidity. According to M. Rosney, their language is dissimilar to Japanese, and that spoken in the Kuriles and in the island of Yezo is also different from Japanese.

The Loo-Choo or Lieu-cheu Islands lie to the N.E. of the Patchu group, and consist of one large island surrounded by smaller ones, the large island being of considerable size and well peopled. It extends from lat. $26^{\circ} 3'$ to $26^{\circ} 53' N.$, and long. $127^{\circ} 34'$ to $128^{\circ} 25' E.$, being 58 miles long, and about 10 or 12 miles broad. In language and physical form the Loo-Choo islanders resemble the Japanese, their Buddhism being more imperfect, and their manners more simple.

SAGHALIN, SAGHALIEN, or TARAKAI, long believed to be a peninsula, is an island lying between lat. $45^{\circ} 54' 2''$ and $54^{\circ} 24' N.$, and long. $141^{\circ} 40'$ and $144^{\circ} 46' E.$ It is about 600 miles in length, and from 20 to 100 broad. It is well wooded and fertile, and coal is found in many places, especially about Jonquiere Bay. Two-thirds of the northern part belong to Russia, and is peopled by Ghiliak.—*Aitcheson's Treaties; Asiatic Researches; Mr. F. H. Batten's British Garhwal; Behm and Wagner; Dr. Bennett; Birkmore's Travels; Burbidge, Gardens of the Sun; Miss Bird's Chersonese; Census, 1872, 1881; Dr. Collingwood in Journ. Ethn. Soc.; Craufurd's Archipelago and Malay Dictionary; Dalton's Ethnology of Bengal; G. W. Earl's Papuans and Physical Geography; Edkins' China; Hooker and Thomson's Flora Indica; Horsburgh's Directory; Mr. Hunt in Moor's Archipelago; Journal Ind. Archipelago; Keane's Asia; Keppel's Archipelago; Peschel; Sir S. Raffles' Memoirs; Raja Brooke's Journal; Logan in Journ. Ind. Archipelago; Lybbeck, Origin of Civilisation; Macgillivray's Voyage in the Rattlesnake; Major-General Sir C. M. MacGregor's Gazetteers; Mallat's Les Philippines; Marsden's Sumatra; M'Nair's Perak; Melvill de Carnbee, in Journ. Ind. Archipelago; Le Moniteur des Indes Orientales; Moresby's New Guinea and Polynesia; Newbold's Malacca; Trel. Saunders in Geog. Soc. Journ.; St. John's Indian Archipelago; J. D. Vaughan in Journ. Ind. Archip.; A. R. Wallace, Eastern Archip.; F. Watson's People of India; Williams' Cruise of the Pearl.*

INDIAN NAVY. In A.D. 1609, in the early years of the English East India Company's trade with India, the need for the protection of their shipping

led to Sir Henry Middleton being sent with three ships to Surat. His flag-ship ran aground at Mocha, and he was detained more than a year by the Arabs, and, after reaching Surat, he withdrew, under the advice of both the native and the English merchants, and drove a kind of filibustering trade in the Red Sea. Afterwards he was joined by Captain John Saris, who was sent out with three more vessels to protect the Indian trade. Captain Hippon, who was despatched about the same time in a single ship, the *Globe*, founded the factories in the Bay of Bengal which developed into the Presidencies of Calcutta and Madras. The victory of Captain Best over the Portuguese fleet in the roadstead of Surat, October 29, 1612, which two years later was eclipsed by the operations of Captain Downton, followed up by exploits in the Persian Gulf, crowned by the capture of Ormuz, disposed of all fear of Portuguese ascendancy in the east, and firmly established this East India Company's trading privileges. In 1615 a local marine force of ten grabs and galivats was established, which, added to the small home squadron, formed the nucleus of the future navy of the Company. The right of trial by common and martial law, as in the royal service, was in 1624 conceded to the Company's commanders and agents abroad, to which was added that of building forts for the security of their trade, the earliest of these being that of Fort St. George at Madras, erected in 1640. The acquisition of Bombay in 1668 gave the Company a valuable port and naval station, and their service,—thenceforth known as the Bombay Marine,—now amounting to a respectable fleet, was not long in distinguishing itself in the defence of Surat and Bombay against the Mahrattas, as well as in repelling the threatened attack of the Dutch in 1672. On the pacification which ensued, the English Company's ships were entrusted with the police of the Southern Indian seas, the protection of the Red Sea being assigned to the Dutch, and that of the Persian Gulf to the French. The suppression of piracy became from the first one of the prominent duties of the service. Surat, where the larger vessels had originally been constructed under native foremen, gave place in 1735 to Bombay as the dépôt for building purposes. The Company's fleet then numbered more than 20 vessels, one of them, the *Revenge*, mounting 28 guns, 20 of which were twelve-pounders. This fine frigate was lost, with all hands, in a gale, April 20, 1782, after having done good service in the war with France and Hyder Ali. In the reduction of Pondicherry, August 23, 1793, the capture of Ceylon in 1795, and the attack upon the Dutch in the Moluccas in 1801, the services of the Bombay Marine were of the utmost value; nor were they less conspicuous in the taking of Mauritius in 1809, in the reduction of Java in 1811, in the attack upon Mocha in 1820, and in the operations against the Joasmi pirates in the Persian Gulf, who, from the year 1797, had given unintermitting trouble to the protective cruisers of the Company. The Burmese war, from 1824 to 1826, gave occasion to many a brilliant display of skill and valour, for which the thanks of the Directors and of both Houses of Parliament were tendered at the conclusion of peace. Remodelled under the charge of Sir Charles Malcolm, brother to the Governor of

Bombay, as superintendent, the service was constituted as a marine corps, with the title of the Indian Navy, under an order dated May 1, 1830.

Under Sir Henry Leake, the naval expedition, 1862-63, which aided in the reduction of Burma, was ably planned and carried out, followed up by no less successful operations in the war with Persia in 1856-57. The latest and not the least brilliant of the warlike services of the Indian navy was that rendered by the detachment which, after aiding in the suppression of panic in Calcutta, pushed up the country to the relief of the beleaguered Europeans. But no officer of the service was ever honoured with knighthood or with a military order. Until the final hauling down of the flag in Bombay harbour at noon of the 30th of April 1863, its duties—faithfully, zealously, and often brilliantly discharged—brought with them little more reward than that which is proverbially said to be conferred by virtue upon itself. Nevertheless its band of skilled officers had given to the world a body of charts the value of which it is impossible to overstate, and the hydrography of the Indian coasts and seas had been carried to a degree of perfection which is beyond all proportion to the slenderness of the means under command. Among the most notable are the surveys of the Red Sea by Elwon and Moresby, those of Mesopotamia by Lynch, Campbell, and Felix Jones, those of the Coromandel coast by Lloyd and Fell, those of the south-east coast of Arabia by Haines and Saunders, with the more recent charts of the Persian Gulf by Constable and Stiffe, and those of the Kattyawar and Malabar coasts by Commander Dundas Taylor. To the last-named officer maritime interests are indebted for the Wind and Current Charts, which give so much security to the navigation of the Indian seas; and above all, for a Sailing Directory, founded on Horsburgh. To the impression produced by Captain Taylor's memorandum on the existing state and deficiencies of the Indian marine surveys, was due the seasonable establishment, about 1873, of a special department of that nature at Calcutta, of which Commander Taylor was made superintendent, with a staff of well-chosen assistants. In the year 1858 the whole service had been summarily broken up, the vessels were condemned to be sold, the officers pensioned off, the official records disposed of as waste-paper. In his anniversary address to the Royal Geographical Society in 1863, Sir Roderick Murchison said its services had been varied, useful, and honourable: the beneficial and enduring results of its suppression of piracy and the slave trade are well known, and the widespread and lasting utility of the excellent surveys made by its officers hold an equally prominent place.—*East India Marine Surveys*.

INDIAN OCEAN is bounded on the west by the coast of Africa to the meridian of Cape L'Agulhas, continued to the antarctic circle. The antarctic circle is its southern limit as far as the meridian of Tasmania, but strictly the western coast of Australia, continued northwards to the larger islands of the Asiatic Archipelago and the Bay of Bengal. One of the large currents of water which have their origin in the Indian Ocean, is the well-known Mozambique current, called at the Cape of Good Hope the L'Agulhas current. Another makes its way through the Straits of Malacca, and, being joined by other warm streams

from the Java and China Seas, flows out into the Pacific, like another Gulf Stream, between the Philippines and the shores of Asia. Thence it attempts the great circle route for the Aleutian Islands, tempering climates and losing itself in the sea on its route towards the N.W. coast of America. There is a counter current of cold water between it and the China shore.—*Findlay*.

INDIAN YELLOW, a dye procured from the urine of the cow, after eating decayed and yellow mango leaves; other authorities refer it to camels' dung. Analysis shows it to be composed chiefly of purrlic acid, combined with magnesia. Its Hindi name is Purree.—*Simmonds' Dict.*

INDIGO.

NIL,	ARAB.	Lil,	HIND.
Main-ay,	BURM.	Indaco,	IT.
Lan-tien,	CHIN.	Nila (dye),	MALAY.
Shwui-tien (liquid),	"	Tarum (plant),	"
Tu-tien (dry),	"	Anil,	PORT., SR.
Tien-tsing (indigo dye),	"	Krutick,	RUS.
Chamno-la,	COCH.-CHIN.	Nili,	SANSK., TAM., TEL.
Guli,	GUJ.		

The plants which afford indigo dyes are grown chiefly in the East and West Indies, in the middle regions of America, Colombia, and Florida, in Africa, and in Europe, and are mostly species of the genera *Indigofera*, *Isatis*, *Tephrosia*, and *Nerium*. *Indigofera tinctoria* furnishes the chief indigo of commerce; produced in Bengal, Madagascar, the Isle of France, and St. Domingo. The *Indigofera disperma*, a plant cultivated in Spain and America, grows higher than the preceding, is woody, and furnishes a superior dye-stuff. Thé Guatemala indigo comes from this species. *Indigofera anil* grows in the same countries, and also in the West Indies. The *Indigofera argentea*, which flourishes in Africa, yields little indigo, but it is of an excellent quality. *I. glauca* is the Egyptian and Arabian species. There are also the *I. cinerea*, *I. erecta* (a native of Guinea), *I. hirsuta*, *I. glabra*, and several other species. Indigo of an excellent quality has been obtained in the East from *Gymnema tingens*, or *Asclepias tingens*, a twining plant. Species of *Ruellia* furnish the well-known room dye of Assam, and the Chinese obtain a blue dye from the *Ruellia indigotica*, as also from the *Isatis indigotica*. *Wrightia tinctoria*, an evergreen with white blossoms, affords some indigo, as do the *Isatis tinctoria*, or woad, in Europe, and the *Polygonum tinctorium*, with red flowers, a native of China. *Baptista tinctoria* furnishes a blue dye, and is the wild indigo of the United States. Plants of other genera are also employed for obtaining indigo, as *Marsdenia tinctoria*, *Galega tinctoria*, but especially the former. Dr. Bancroft (i. p. 190) also adduces *Spilanthes tinctoria*, *Scabiosa succisa*, *Cheiranthus fenestralis*, also a species of *Bignonia* and a *Tabernæmontana*, on the African coast, with *Anorpha fruticosa* and *Saphora tinctoria*, as all yielding a blue dye, or coarse sorts of indigo. It is obtained in Nubia from the *Tephrosia apollinea*, and on the banks of the Niger from the *T. toxicaria*; and *Indigofera Australis* of Australia produces a good indigo. A small quantity has been produced by chemists in the laboratory.

Indigo is produced largely in Bengal and N. India, from the 20th to the 30th deg. of north latitude; also in the provinces of Tinnevely, Cuddapah, and the two Arcots of the Madras Presidency; in Java, in the largest of the Philippine

islands in Guatemala, Caraccas, Central America, and Brazil. It is also cultivated in some of the West India islands, especially St. Domingo, but not in large quantities. The varieties recognised in commerce are—1st, Bengal, which, from the care taken in its preparation, and the large scale on which it is made in that district, is the best; and its various gradations of quality, ten in number, varying from 9s. to 5s. per lb., are always kept distinct. In other sorts, they are usually much mixed. 2d, Madras and Kurpah; 3d, Oudh; 4th, Manilla; 5th, Java; and 6th, South American. The last is packed in skins or cases of dried ox-skin, and its qualities are distinguished as follows:—1st, Flores; 2d, Sobres; and 3d, Cortes; all the others are in wooden chests, containing about 250 lbs. each. Indigo has been manufactured from time immemorial in the district of Multan, and the country west of the river Indus, called the Derajat. It is exported, but not to any great extent, in the direction of Afghanistan.

In the year 1855, the out-turn of the Bengal crop was 128,551 maunds; and in the 13 years from 1859 to 1871 inclusive, the out-turns ranged from 90,500 to 113,550 maunds, as under:—

1859, . 106,500	1864, . 100,618	1868, . 105,504
1860, . 113,500	1865, . 102,000	1869, . 88,999
1861, . 68,000	1866, . 112,200	1870, . 90,500
1862, . 110,000	1867, . 96,000	1871, . 95,700
1863, . 93,800		

In later years the export from all India were—

Year.	Cwt.	Ra.	Year.	Cwt.	Ra.
1869-70,	99,206	2,89,38,230	1876-77,	100,384	2,96,27,855
1870-71,	98,085	3,17,80,450	1877-78,	120,605	3,49,43,340
1871-72,	103,184	3,19,25,030	1878-79,	105,051	2,96,04,625
1872-73,	115,414	3,70,54,750	1879-80,	100,923	2,94,72,265
1873-74,	115,212	3,42,68,240	1880-81,	116,870	3,57,15,814
1874-75,	81,466	2,57,63,022	1881-82,	150,363	4,50,90,802
1875-76,	110,392	2,87,50,025			

The one-half to the United Kingdom, an eighth part to France, and a twelfth part to Austria; the United States, Persia, and Italy take the rest.

Its total imports into the United Kingdom in the years 1867 to 1881 ranged between 58,283 and 106,307 cwt., varying greatly from year to year; the values, £1,712,995 and £2,937,224.

Since the year 1833, in Bengal, the cultivation of the indigo plant and manufacture of indigo have greatly fallen off. In the troubles which followed the famine of 1769, the cultivation had declined. During the years which followed 1786, Lord Cornwallis, and with him Sir John Shore, re-established it under extraordinary privileges. Minute accounts of how the plant should be grown and the drug beaten out, written by high officials, appeared in the public prints. The Company's servants were permitted, nay, encouraged, to remit their savings in indigo investments, in spite of the croakings of an alarmist, who foretold the failure of such efforts by reason of the manufacture having been successfully introduced into the Brasils, which were nearer the European market. For a time, indeed, the Government was shy of actually engaging in the cultivation, and contented itself with winking hard at its officers, who were willing to venture on their own account. But the revival of the indigo planting, which took place in the ten years subsequent to 1786, was conducted under the auspices of Government, though at the risk of its commercial residents. For long it continued to be the most profitable

part of these officers' private trade, and more than one great Calcutta house owed its origin to their operations. The valleys of the Damuda and of the Adjie, and indeed all Bardwan, were dotted with factories.

The Indigo of Bengal is divided into two classes, called in commercial language, Bengal and Oudh; the first being the produce of the southern provinces of Bengal and Behar, and the last that of the northern provinces, and of Benares. The first class is in point of quality much superior to the other. The inferiority of the Oudh indigo is thought to be more the result of soil and climate than of any difference in the skill with which the manufacture is conducted. The indigo of Madras, which is superior to that of Manilla, is about equal to ordinary Bengal indigo. The produce of Java is superior to these. Large quantities of indigo, of a very fine quality, are grown in Sind. Mr. Wood, deputy collector of Sukkur, was of opinion that Sind is much better suited than Bengal for the production of this dye-stuff; the alluvial soil on the banks of the Indus is equal in richness to that on those of the Ganges, and the climate seems equally well suited for the growth of the plant. But in two years out of three, the crops of the Bengal plants are injured by excessive inundations, while the work of gathering and manipulation is necessarily performed during the rainy season under the greatest imaginable disadvantages. In Sind, on the other hand, the inundation of the river is produced almost solely from the melting of the snows in the Himalayas, and it is not liable to those excessive fluctuations in amount, or that suddenness in appearance, peculiar to inundations chiefly arising from falls of rain. The Ganges sometimes rises ten feet in 24 hours, and at some parts of its course its depth is at times forty feet greater during a flood than in fair weather; while the Indus rarely rises above a foot a day, its extreme flood never exceeding fifteen feet, the limits and amount of the inundation being singularly uniform over a succession of years. Moreover, as rain hardly ever falls in Sind, and when it does so, only continues over a few days, and extends to the amount of three or four inches, no danger or inconvenience from this can be apprehended. The districts of Kishnagar, Jessore, and Murshidabad, in Bengal, ranging from 88° to 90° E. longitude, and 22½° to 24° of N. latitude, produce the finest indigo. That from the districts about Bardwan and Benares is of a coarser or harsher grain. Tirhut, in lat. 26° N., yields a tolerably good article. The portion of Bengal most propitious to the cultivation of indigo, lies between the river Hoogly and the main stream of the Ganges.

The culture of indigo is a very precarious trade, not only in so far as respects the growth of the plant from year to year, but also as regards the quantity and quality of the drug which the same amount of plant will afford in the same season. The fixed capital required in the manufacture consists simply of a few vats of common masonry for steeping the plant and precipitating the colouring matter, a boiling and drying-house, and a dwelling for the planter. Thus a factory of ten pairs of vats, capable of producing, at an average, 12,500 lbs. of indigo, worth on the spot £2500, will not cost above £1500 sterling. The buildings and machinery necessary to produce an

equal value in sugar and rum, would probably cost about £4000.

The indigo of the *Indigofera tinctoria* is obtained by subjecting the plant to a fermentive process, in large masses, in tanks. After its removal, the water is stirred and beaten by paddles, its colour passes to a blue, and the suspended particles settle to the bottom, forming a blue sediment, which, after the water is drawn off, is dried in the sun and cut up into cakes. The time for sowing varies in Bengal proper, Tirhut, and the several districts of the N.W. Provinces. In Bengal, sowings prevail in the month Kartik (October), hence called Kartiki. In Tirhut, Sarun, and Champarum, in which there is rich alluvial land and a natural moisture, the sowings are in February (Phalgun), and the factories are known as Phalguni. The preparation of the land in Tirhut is much more elaborate than in Bengal proper or the N.W. Provinces, and altogether a more advanced system prevails there, and the work is regularly spread over the whole year. In the N.W. Provinces and in Oudh, the sowings chiefly take place on the first fall of rain in June (Asarh), hence the factories are known as Asarhi, but these have sowings also called Jamowa, which is a sort of compromise between the Phalguni and Asarhi periods. An artificial moisture is secured in February and March by irrigation, and small patches of indigo are sown near every available well.

In the *N. W. Provinces* the planter's work comes on him all in a heap in June or July (Asarh and Sawan). He has sowing, cutting the stumps left of the past year's crop, manufacture of the new crop, packing and despatch of the indigo. The fresh plant is filled into steeper vats, and pressed down with beams of wood interlaced with bamboos; water is then let in from the reservoir, and steeping or fermentation allowed to go on for ten or twelve hours, according to the state of the atmosphere. After fermentation is complete, the liquor is drawn off into a lower beating vat (hauz mahye). Ten or twelve men now enter the vat with shovels; they are called mahunean or beaters; they beat (mahye) from one and a half to two hours, and by this means a great quantity of carbonic acid gas is disengaged, and the particles of indigo get thoroughly exposed to the atmosphere, and obtain their requisite supply of oxygen, after which they granulate. The vat is now allowed to settle, the indigo gradually subsides, and the water, which separates, is drawn off, and is of the colour of dark sherry. A sediment is left at the bottom of the vat, which is collected and discharged into a cistern alongside, and runs through a strainer (channah) into the boiler (karah), when it is heated to boiling point. From the boiler the liquid indigo (mal) is run on a table on which is spread a sheet, and allowed to filter through until the liquid runs clear. The day following, the indigo, fully drained, is of the consistency of curds, when it is removed to the press-house, put into presses, and subjected to severe pressure. With the aid of nuts and screws, a solid mass is thus obtained, which is taken to the drying-house (bari khana), placed on a cutting frame, and cut with brass wire into cubes or cakes (goti or bari). The cakes are placed on wicker-work frames to dry. A whitish efflorescence soon covers the cakes, and a strong smell

of ammonia prevails throughout the drying-house. When quite dry, the cakes are taken down, brushed, assorted according to colour and quality (rang milan), and packed into boxes for export, after which the N.W. planter has nothing to do till the following June.

In *Tirhut* the preparation of the land is commenced in October. All the old stumps are dug out, the land is twice ploughed (somra or docha), and a flat roller (henga) passed over, to break the clods and keep in the moisture. If the sith or jhuthi, or refuse indigo stalks (a rich maudre), has not already been spread on the land, and allowed to decompose, it is now spread, and, to save time, set fire to, and the ashes well ploughed in; then all the smaller clods are pulverized, and all grass and refuse removed. The land is then finally ploughed and rolled, and allowed to rest till the end of January. In the beginning of February, sowings begin and last to the end of March. In April and May, the young plant is weeded. About the middle of June or first week in July, manufacturing begins, and lasts without interruption till the end of September. In October the cakes are taken down from the shelves where they have been drying, brushed, packed in boxes weighing about three factory maunds each, marked and numbered, and finally sent down to Calcutta for sale and shipment to Europe, China, Persia, and America.

In *Bengal proper*, indigo is cultivated at a season when nothing else is on the ground. It occurs intermediately between the two great crops of the year, and it has puzzled Boards of Revenue before now to decide whether it is a rabi or kharif crop. It is cleared off the ground in time for another crop, and it is far from being an exhausting crop. The ryots know this well, and all they get for their indigo is additional to their income, though, at a strict calculation, it would not cover the expense of the cultivation.

After having ploughed the ground in October, November, and the beginning of December, they sow the seed in the last half of March and the beginning of April, while the soil, being neither too hot nor too dry, is most propitious to its germination. A light mould answers best, and sunshine, with occasional light showers, are most favourable to its growth. Twelve pounds of seed are sufficient for sowing an acre of land. The plants grow rapidly, and will bear to be cut for the first time at the beginning of July; nay, in some districts so early as the middle of June. The indications of maturity are the bursting forth of the flower-buds and the expansion of the blossoms, at which period the plant abounds most in the dyeing principle. Another indication is taken from the leaves, which, if they break across when doubled flat, denote a state of maturity. But this character is somewhat fallacious, and depends upon the poverty or richness of the soil. When much rain falls, the plants grow too rapidly, and do not sufficiently elaborate the blue pigment. Bright sunshine is most advantageous to its production. The first cropping of the plants is the best; after two months a second is made, after another interval a third, and even a fourth; but each of these is of diminished value.

The plant is sold in Bengal by the bundle, which is measured by a chain. In the Doab it is

sold for 1 rupee for 5 to 6 maunds. 200 to 225 maunds of plant to a maund (75 lbs.) of indigo, is a fair average produce. Therefore it would cost about 36 to 40 rupees for the plant necessary to make 75 lbs. of indigo. The expense of manufacturing would be but little.

The finest quality of dye is produced by factories in the Jessore and Kishnagar districts. An ordinary plantation there comprises 4000 acres of land, which may yield on an average 1000 maunds of 82 lbs. each. The annual outlay for labour, seed, etc., on this one branch of industry, is seldom less than a million and a half sterling, of which fully nineteen-twentieths are expended by Europeans. The cultivation is generally one of hazard, as the fields are always liable to be swept of their produce during any heavy or sudden fall of rain. The plant often suffers from long drought. With a few good seasons, favourable soil, a thorough knowledge of the business, and a certain degree of industry, an indigo planter may reckon on realizing an independence in less than a dozen years, supposing him to have started with ample means.

In South Arcot, Kurnool, and Cuddapah, indigo is largely cultivated, and especially in the last-named district, which is well suited for the cultivation of the staple. The average growth in the Madras Presidency covers 304,676 acres, two-thirds of which are in the South Arcot, Cuddapah, Nellore, Kistna, and Kurnool districts. Cuddapah indigo is grown by ryots on contract to deliver so much indigo plant at the factory at a fixed rate per bundle. The agents of the Madras firms avoid occupying the same taluks, so that there is no system of forcing the cultivation upon the ryots, who are much too independent to submit to such a process. The trade is quite free, and the system of advances to the tenantry has done a great deal to improve their condition, as well as facilitated the collection of the revenue. The cultivation of indigo is not fixed; it extends or contracts with the demand for the article. It has, however, been steadily increasing of late years; many of the richer ryots cultivate it, and manufacture it on their own account. Native capitalists also engage in the trade. Mr. Wedderburn estimated the cultivation and manufacture of indigo by natives, without European superintendence, in the ratio of 10 to 1 of that produced under European management. Eight lakhs of rupees were drawn by bills in 1869, on the Cuddapah Treasury, by Madras mercantile houses. And eight lakhs scarcely represent one-half of the sum paid for indigo, the out-turn of which, on 36,000 acres, cultivated in the year 1860, at an average profit of 60 rupees per acre, will show a value of 18 lakhs of rupees.

Mr. Rohde (M.S.) mentions that two methods of preparing indigo are in use in the Madras territories. That called Karpa indigo, and which is known in the market as Madras indigo, is prepared from the dried leaves; the Bimlipatam indigo is from the recent leaves upon the Bengal plan. He says that in the indigo factories of Bengal, using the recent leaves, there are two large stone-built cisterns, the bottom of the first being nearly upon a level with the top of the second, in order to allow the liquid contents to be run out of the one into the other. The uppermost is called the fermenting vat or the steeper,

its area is 20 feet square, and its depth 3 feet; the lowermost, called the beater or beating vat, is as broad as the other, but one-third longer. The cuttings of the plant as they come from the field are stratified in the steeper till this be filled within 5 or 6 inches of its brim. In order that the plant during its fermentation may not swell and rise out of the vat, beams of wood and twigs of bamboo are braced tight over the surface of the plants, after which water is pumped upon them till it stands within three or four inches of the edge of the vessel, and an active fermentation speedily commences, which is completed within fourteen or fifteen hours, a little longer or shorter according to the temperature of the air, the prevailing winds, the quality of the water, and the ripeness of the plants. Nine or ten hours after immersion of the plant, the condition of the vat must be examined, for then bubbles appear, which rise like little pyramids, are at first of a white colour, but soon become grey, blue, and then deep purple red. The fermentation is at this time violent, the fluid is in constant commotion, innumerable bubbles mount to the surface, and a copper-coloured dense scum covers the whole. As long as the liquor is agitated, the fermentation must not be disturbed, but when it becomes more tranquil, the liquor is to be drawn off into the lower cistern. It is of the utmost consequence not to push the fermentation too far, because the quality of the whole indigo is thereby deteriorated; but rather to cut it short, in which case there is, indeed, a loss of weight, but the article is better. The liquor possesses now a glistening yellow colour, which, when the indigo precipitates, changes to green. The average temperature of the liquor is commonly 85° Fahr.; its specific gravity at the surface is 1001.5, and at the bottom 1003. So soon as the liquor has been run into the lower cistern, ten men are set to work to beat it with oars or shovels four feet long, called basquets; paddle-wheels have also been employed for the same purpose. Meanwhile two other labourers clear away the compressing beams and bamboos from the surface of the upper vat, remove the exhausted plant, set it to dry for fuel, clean out the vessel, and stratify fresh plants in it. The fermented plant appears still green, but it has lost three-fourths of its bulk in the process, or from 12 to 14 per cent. of its weight, chiefly water and extractive matter. The liquor in the lower vat must be strongly beaten for an hour and a half, when the indigo begins to agglomerate in flocks, and to precipitate. This is the moment for judging whether there has been any error committed in the fermentation, which, if so, must be corrected by the operation of beating. If the fermentation has been defective, much froth rises in the beating, which must be allayed with a little oil, and then a reddish tinge appears. If large round granulations are formed, the beating is continued, in order to see if they will grow smaller. If they become as small as fine sand, and if the water clear up, the indigo is allowed quietly to subside. Should the vat have been over-fermented, a thick fat-looking crust covers the liquor, which does not disappear by the introduction of the flask of oil. In such a case the beating must be moderated. Whenever the granulations become round and begin to subside, and the liquor clears up, the beating must be discontinued. The froth

or scum diffuses itself spontaneously into separate minute particles, that move about the surface of the liquor, which are marks of an excessive fermentation. On the other hand, a rightly fermented vat is easy to work; the froth, though abundant, vanishes whenever the granulations make their appearance. The colour of the liquor when drawn out of the steeper into the beater is bright green, but so soon as the agglomerations of the indigo commence, it assumes the colour of Madeira wine, and speedily afterwards, in the course of beating, a small round grain is formed, which on separating makes the water transparent, and falls down, when all the turbidity and froth vanish. The object of beating is threefold: first, it tends to disengage a great quantity of carbonic acid present in the fermented liquor; secondly, to give the newly-developed indigo its requisite dose of oxygen by the most extensive exposure of its particles to the atmosphere; thirdly, to agglomerate the indigo in distinct flocks or granulations. In order to hasten the precipitation, lime-water is occasionally added to the fermented liquor in the progress of beating, but it is not indispensable, and has been supposed capable of deteriorating the indigo. In the front of the beater a beam is fixed upright, in which three or more holes are pierced a few inches in diameter. These are closed with plugs during the beating; but two or three hours after it, as the indigo subsides, the upper plug is withdrawn, to run off the supernatant liquor, and then the lower plugs in succession. The state of this liquor being examined, affords an indication of the success of both the processes. When the whole liquor is run off, a labourer enters the vat, and sweeps all the precipitate into one corner, and empties the thinner part into a spout which leads into a cistern alongside of a boiler 20 feet long, 3 feet wide, and 3 feet deep. When all the liquor is once collected, it is pumped through a bag for retaining the impurities into the boiler, and heated to ebullition. The froth soon subsides, and shows an oily-looking film upon the liquor. The indigo is by this process not only freed from the yellow extractive matter, but is enriched in the intensity of its colour, and increased in weight. From the boiler the mixture is run, after two or three hours, into a general receiver, called the dripping vat or table, which, for a factory of twelve pairs of preparation vats, is 20 feet long, 10 feet wide, and 3 feet deep, having a false bottom 2 feet under the top edge. This cistern stands in a basin of masonry made water-tight with chunam hydraulic cement, the bottom of which slopes to one end in order to facilitate the drainage; a thick woollen veil is stretched along the bottom of the inner vessel to act as a filter. So long as the liquor passes through turbid, it is pumped back into the receiver. Whenever it runs clear, the receiver is covered with another piece of cloth to exclude the dust, and allowed to drain at its leisure. Next morning the drained indigo is put into a strong bag and squeezed in a press. The indigo is then carefully taken out of the bag, and cut with a brass wire into bits about 3 inches cube, which are dried in an airy house upon shelves of wicker-work. During the drying, a whitish efflorescence comes upon the pieces, which must be carefully removed with a brush. In some places, particularly on the coast of Coromandel, the dried indigo lumps are

allowed to effloresce in a cask for some time, and when they become hard, they are wiped and packed for exportation.

In preparing indigo from *dried leaves*, the ripe plant being cropped is to be dried in sunshine from 9 o'clock in the morning till 4 in the afternoon during two days, and thrashed to separate the stems from the leaves, which are then stored up in magazines till a sufficient quantity be collected for manufacturing operations. The newly-dried leaves must be free from spots, and friable between the fingers. When kept dry, the leaves undergo, in the course of four weeks, a material change, their beautiful green tint turning into a pale blue grey, previous to which the leaves afford no indigo by maceration in water, but subsequently a large quantity. Afterwards the product becomes less considerable. The dried leaves are infused in the macerated steeping vat, with six times their bulk of water, and allowed to macerate for two hours, with continual stirring, till all the floating leaves sink. The fine green liquor is then drawn off into the beater vat; for if it stood longer in the steeper, some of the indigo would settle among the leaves and be lost. Hot water, as employed by some manufacturers, is not necessary. The process with dry leaves possesses these advantages, that a provision of the plant may be made at the most suitable times, independently of the vicissitudes of the weather, the indigo may be uniformly made, and the fermentation of the fresh leaves, often capricious in its course, is superseded by a much shorter period of simple maceration.

Dr. Walker mentions, in his Account of the Productions of Humamkunda in the Dekhan, that only one species, *Indigofera tinctoria*, is there used for the preparation of indigo, and it is collected in the rains, when the dye is commonly made. A strong decoction is made of the plant, —leaves, flowers, pods, and twigs being all indiscriminately thrust into a pot; when this is hot an infusion of *Eugenia jambolana* (rose-apple tree) is added, the indigo is immediately precipitated, and the superincumbent water being drawn off, is dried in the sun.

The native plan of mounting the indigo vat merits attention. A potash ley is prepared from the ashes of the *Euphorbia tiruculli* (milk bush hedge) and lime, by mixing them together and then filtering; in this ley seeds of the *Trigonella fœnum-græcum* and *Cassia tora* are boiled, and the liquor being strained, is poured into the water drawn off after the precipitation of the indigo, and the indigo itself is then put in, and some more potash ley is added.

In three or four hours the fermentation is perfected, and the vat filled for the purposes of the dyer. The theory of this vat is very obvious: extractive matter derived from the liquor in which the indigo was first boiled, with the sugar, starch, and mucilage of the two leguminous seeds, cause a fermentation by which the indigo is rendered soluble in the alkaline solution. The process is more simple than that usually followed by dyers in Europe, and is in perfect accordance with every rule of practical chemistry. There is no superfluity and no waste, and on the whole it is a most favourable specimen of native ingenuity and skill.

The indigo plant is cultivated in China to a great extent, as well as a species of *polygonum*,

from the leaves of which a colour is produced which nearly equals the blue obtained from indigo.

With the Javanese, who of all the Malayan race have certainly made the highest progress in all the useful arts, there is a specific term for dyeing or tinting,—madall; but the Malays express it only by Chalap, the word for dipping. Yet the only generic words which either of them possesses for colour, are the Sanskrit Warna and the Portuguese Tinta. Their colours are usually sombre,—little varied, but generally fast. Blues are always produced from indigo, yielded for the most part by the *Indigofera tinctoria*, as in other parts of India, but in Sumatra occasionally from the *Marsdenia tinctoria*, a plant of the natural order of the Asclepiaceae. Kulaf or vasma, in the Panjab, is the pounded dried leaves of the indigo plant, used principally as a hair-dye after the previous application of henna (*Lawsonia inermis*). The powdered leaf of *Indigofera anil* is used in the cure of hepatitis.—*Capper's Three Presidencies; Powell's Handbook; Mr. Rohde's MSS.; Simmonds; Royle's Him. Botany; Annals of Indian Administration, 1870; Bonyng, America; Tomlinson's Dict.; Sirr's China; Cal. Cat. Ex., 1862; Carnegie.*

INDIGOFERA, a genus of plants, some of them of great economic value, of the natural order Fabaceae. About 150 species are known, many of which grow in the East Indies; amongst others—

anil.	disperma.	linifolia.	tinctoria.
arbores.	dosua.	mucronata.	trifoliata.
argentea.	echinata.	pauciflora.	trita.
aspalathoides.	elliptica.	pedicellata.	uncinata.
atropurpurea.	enneaphylla.	pentaphylla.	uniflora.
brunonia.	flaccida.	polygonata.	violacea.
cinerascens.	glandulosa.	pulchella.	viscosa.
cœrulea.	hirsuta.		

There are also several undetermined species, the dug kenti and the kenti of Kaghan (qu. *I. arbores*), the doun-daloun of Burma, the latter a tree four or five feet in girth, found both in the Rangoon and Tounghoo districts, though it is scarce. Its white-coloured wood is adapted to every purpose of house building. An indigenous species of indigo is sometimes in Tenasserim used in forming a blue dye, and a wild indigo is found abundant in the Sutlej valley between Rampur and Sungnam, at an elevation of 7000 feet, in rocky hills. The species are indigenous in the equinoctial parts of Asia, Africa, and America; but there is some difficulty in ascertaining all the cultivated species, as the subject is usually neglected both by naturalists and cultivators.

Indigofera anil is said by De Candolle to grow wild in America, and to be cultivated in both India, as also along the Gambia in Africa. Drs. Wight and Arnott state they have not sufficient materials to determine if *I. anil* be a distinct species. According to Dr. Honigberger, *I. anil* is cultivated in some provinces of the Panjab, but more for dye than for medicine, the leaf (*Vishado daniel*, SANSK.) being used by the natives in hepatitis.—*O'Sh. p. 292; Honigb. p. 289.*

INDIGOFERA ARBOREA. *Rozb. iii. p. 381.*
Mantho of CHAMBA HILLS. Dug, Hast, East of PANJ.
Jand of MURREE HILLS. Hathl, Kalint, . . .

A shrub of no value as a timber tree; elevation 7000 feet.—*Rozb.; Powell.*

INDIGOFERA ARGENTEA, *L.*, is *I. cœrulea* and *I. colorata*, *Rozb.* Drs. Wight and Arnott

state that it is the species cultivated in Egypt and Barbary for the sake of its indigo, and, according to Humboldt, also in America. *I. argentea* is shrubby, with round branches, which appear of a silky whiteness from appressed pubescence.—*Voigt.*

INDIGOFERA ASPALATHOIDES. *Vahl.*

<i>I. aspalathifolia, Rozb.</i>	<i>Lespedeza juncea, Wall.</i>
<i>Aspalathus Indicus, Linn.</i>	
Manili, . . . MALEAL.	Shiva nimba, . . . SANSK.
Manneli, . . . ,	Shevenar vembu, . . . TAM.

A shrubby, low-growing plant of the Peninsula of India. The small leaves, flowers, and tender shoots being supposed to possess cooling demulcent and alterative properties, are prescribed in decoction in leprosy and cancerous affections. Rheede tells us that from the root of it an oil is extracted which is of use in erysipelas.—*Ainsl.; Voigt.*

INDIGOFERA CŒRULEA. *Rozb.*

<i>I. brachycarpa, D. C.</i>	<i>Kar-nili, . . . TEL.</i>
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This plant grows in the Dindigul Hills and the Rajamundry Circars, and Dr. Roxburgh states that it comes near to *I. argentea*, *Linn.* De Candolle inquires whether this be sufficiently distinct from *I. tinctoria*. It is an erect shrubby species, growing in dry, barren, uncultivated ground to the height of three feet, and higher in good garden soil. It flowers during the wet and cold seasons. The leaves are pinnate. Dr. Roxburgh states that he extracted a most beautiful light indigo from the leaves of this plant, and in greater quantity than he ever could from the common indigo plant, or even from *Nerium tinctorium*. The process he adopted was similar to that practised with the leaves of *Nerium tinctorium*, or the scalding process.—*Rozb.*

INDIGOFERA ENNEAPHYLLA. *Linn.*

<i>I. caespitosa, Wight.</i>	<i>Hedysarum prostratum, L.</i>
<i>Chepu-naringi, . . . TAM.</i>	<i>Chala pachchi, . . . TEL.</i>
<i>Cherra gadan, . . . TEL.</i>	

Grows at Dindigul, Saharunpur, Prome, Segain. The expressed juice is given as an alterative by the native physicians in old syphilitic diseases.—*O'Sh.; Rozb. iii. p. 376; Voigt.*

INDIGOFERA GLANDULOSA. *Willde.* Barugadam, TEL. A small shrubby species, a native of moist rich lands amongst the Circar mountains. Flowers and ripens its seeds during the wet and cold seasons. The natives of the hilly countries make meal of the seeds, which they bake into bread, and use as an article of diet, when more agreeable food is scarce. Cattle are fond of the plant.—*Rozb.*

INDIGOFERA HETERANTHA. *Wall.*

Kathi, Kati, . . . BEAS.	Kanti, Khenti, . . . HIND.
Kathawat, . . . ,	Kiitz of . . . KAGHAN.
Shagali of . . . CHENAB.	Katsu, Kaskoi of . . . RAVI.

This, the commonest of the Himalayan species, is a shrub which is abundant in many places in the hills and the eastern skirts of the Suliman Range from 2500 to 8000 feet. In Kashmir and elsewhere the twigs are largely used for making baskets, etc., and they form part of some of the twig bridges. In Kangra the flowers are used as a pot herb.—*Drs. Stewart, Cleghorn.*

INDIGOFERA LINIFOLIA, *Retz*, vegetates in both Peninsulas, in Bengal, and in the lower mountains of the Panjab. There the root is used in febrile eruptions.—*Honig; Stewart.*

INDIGOFERA TINCTORIA.

INDIGOFERA TINCTORIA. Linn.

I. Indica, <i>Lam.</i>	I. sumatrana, <i>Gert.</i>
Lan-tion, . . . CHIN.	Ameri, . . . MALAC.
Tayang, . . . BISAYA.	Wamun, Basmu, . . . PANJ.
Mai-nay, Shan-may, BURM.	Nili, . . . SAMBK.
Nil, . . . HIND.	Tayum, . . . TAG.
Tom, Tarum, Takum, MAL.	Aviri, Nilam, TAM., TEL.

This is the dye species generally cultivated in India, whence it has been introduced into Africa and America, and in the W. Indies is sometimes called Indigo Franc, or French indigo. It is said to be found wild along the sands of Senegal. It is grown occasionally by Karens and Burmese, and is cultivated in the Panjab. Indigo from the Indus is mentioned in Arrian's Periplus, and many traces of an export of it by the same river to Europe are found in the historical records as early as the middle of the 17th century. At present the chief tracts for its cultivation are in the Southern Panjab, near Multan, largely in Lower Bengal, in the Northern Circars, and throughout the North Arcot and the Cuddapah collectorates of the Peninsula of India.—*Roxb.; Steu.; Mason's Tenasserim; Eng. Cyc.*

INDIGOFERA TRITA. Linn. *Indigofera cinerea, Roxb.* A common herbaceous plant, with trifoliate leaves, and small, reddish-green flowers.—*Roxb. iii. p. 371.*

INDO-ATLANTIC, a designation of the Caucasian race of mankind, and of their language, usually styled Indo-European. Indo-Australian, a name applied by Mr. Logan to the Negroid race occupying the southern shores of Asia. Indo-Briton, a term by which the mixed races of European descent are known in British India. They are also called Eurasians, East Indians, and half-castes. Many, however, who so call themselves are Creoles of pure descent, but Creole is not used in India. Indo-Chinese races occupy the low lands near the Brahmaputra; but the term is applied strictly to the people occupying the countries between India and China. Indo-European, a term applied by Dr. Prichard to a dynasty of languages, sometimes called Indo-Germanic, and by later writers also Aryan or Iranian. Indo-Germanic, a term employed to designate the Indo-Atlantic, Indo-European, or Caucasian race of man, and the family of languages spoken by them. Indo-Getic, a term in use to designate the Scythic Getæ race who settled in India and on its N.W. borders. Indonesia, a geographic and ethnic name suggested by Mr. Logan to designate the Eastern Archipelago.—*Campbell, p. 49.*

INDORE, a city on the left bank of the Katki, in Malwa, in lat. 22° 42' N., and long. 74° 54' E., and 1998 feet above the sea. It is the capital of the dominions of the maharaja Holkar. The state has an area of 8075 square miles, and population about 635,000 souls, lying between lat. 21° 24' and 24° 14' N., and long. 74° 28' and 77° 10' E. It is nearly bisected by the Nerbadda river, and has the Chambal and its tributaries on the northern part. The state consists of many isolated tracts, and within it is the British cantonment of Mhow (Mau). It is bounded on the north by part of Sindia's dominions, on the east by the states of Dewas and Dhar and the district of Nimar, on the south by Kandesh district, and on the west by Barwani and Dhar. Like the rest of Malwa, the soil of Indore is fertile, consisting

INDRA.

largely of the rich black loam known as cotton soil. The principal crops are wheat, rice, millets, pulses, oil-seeds, sugar-cane, cotton. The revenue of the state in 1878, £512,300; the expenditure, £416,600. The Residency or Rajkumar College at Indore, for the education of the sons of the chiefs and gentry of Central India, is affiliated to the Calcutta University.

Indore was captured by the British on the 24th August 1804. As a city, it is of modern date. That part of the Holkar capital called Old Indore was a small village, the site of which pleased Ahalya Bai, who encamped at it after the death of Mulhar Rao Holkar. The dominant race in Indore are Mahrattas, and there are a considerable number of Gonds and Bhils. There are several cotton mills in the state of Indore (one belonging to the Maharaja), which are in constant work. Opium manufacture is another important industry, and in 1877-78, 16,243 chests were exported from Indore.

INDO-SCYTHI and Indo-Scythian are terms employed to designate races who became early occupants of N.W. India. The Yuchi, established in Bactria and along the Jihun eventually bore the name of Jeta or Yetan, that is to say, Getes. Their empire subsisted a long time in this part of Asia, and extended even into India. These are the people whom the Greeks knew under the name of Indo-Scythi. The period allowed by all authorities for the migration of these Scythic hordes into Europe, is also that for their entry into India. The sixth century is that calculated for the Takshak from Sehesnagdes; and it is on this event and reign that the Puranas declare that from this period no prince of pure blood would be found, but that the Sudra, the Turshka, and the Yavan would prevail. All the Indo-Scythic invaders held the religion of Buddha, and hence the conformity of manners and mythology between the Scandinavian or German tribes and the Rajputs increased by comparing their martial poetry. The Indo-Scythi of Arrian were a Scythic tribe who had settled along the Indus. They attempted to penetrate eastward by way of Kandesh and Malwa, but were opposed by Vikramaditya. The Indo-Scythia of the Greeks was therefore the valley of the Indus, Northern Indo-Scythia being the Panjab proper, and occupied by the Med race, and Southern Indo-Scythia being Sind, occupied by the Jat, a tribe of the Abar hordes. Pliny calls the western region of the Caucasus, Scythia Sendica; and about this were congregated the Maidi, next to the Sindi and Kerketæ; a tribe of Arii or Arichi, who gave their name to an island of Aria, or Arietas, or river Arius; a tribe of Maetes or Meotai, with towns named Madia and Matium; a tribe of Matiani, with a town of Mateta; a tribe of Kottæ, with a country called Kutais, and cities called Kuta and Kutaia; a tribe named Kolchli, with a mountain and a district called Koli; a tribe of Iberes, with a town called Iberia; a tribe called Buonomai, a district of Minyas, a city of Male; and a tribe of Baternæ, with a river called Bathys, and a port named Bata;—these names reminding the investigator of the Med, Kathi, Kol, Abhir, Mina, Mallina, and Bhatti of the valley of the Indus. See India.

INDRA, the Hindu god of thunder, a personification of the sky, the chief of the Devata or Shra, the name being from the Sanskrit root Id, to be

glorious (vide Devata). The attributes of Indra correspond to those of the Jupiter Pluvius and Jupiter Tonans of the Greeks and Romans, and the Thor of Scandinavia, and as such he is the impersonation of the phenomena of the skies. He is represented as a white man sitting upon his celestial vahan, the elephant Airavati, produced at the churning of the ocean, and holding in his hand the vajra or thunderbolt. One of the Rig Veda hymns describes the contest of Indra, the lord of thunder, with Vritra, otherwise called A'hi, the personification of the rain-cloud; and those who know how important rain is to countries like India, can appreciate the joy that welcomes descending showers upon the parched and heated fields, and understand how the cloud which is supposed to imprison the waters is regarded as a demon, while the lightning that cleaves it, and sets them free to descend on earth, is worshipped as a beneficent deity. The following is Professor Wilson's translation of the hymn in the 32d Sakta:—

- 'I declare the former valorous deeds of Indra, which the thunderer has achieved: he clove the cloud; he cast the waters down (to earth); he broke (a way) for the torrents of the mountain.
- 'He clove the cloud, seeking refuge on the mountain; Twashtri sharpened his far-whirling bolt; the flowing waters quickly hastened to the ocean, like cows (hastening) to their calves.
- 'Impetuous as a bull, he quaffed the soma juice; he drank of the libations at the triple sacrifice. Maghavan took his shaft, the thunderbolt, and with it struck the first-born of the clouds.
- 'Inasmuch, Indra, as thou has divided the first-born of the clouds, thou hast destroyed the delusions of the deluders, and then engendering the sun, the dawn, the firmament, thou has not left an enemy (to oppose thee).
- 'With his vast destroying thunderbolt, Indra struck the darkling mutilated Vritra; as the trunks of trees are felled by the axe, so lies A'hi prostrate on the earth.'

Indra takes a different position in each of the three periods of Hindu mythology. In the Vedic period he is the great being who inhabits the firmament, guides the winds and clouds, dispenses rain, and hurls the thunderbolt. In the Epic period he is still a principal deity, taking precedence of Agni, Varuna, and Yama. In the Puranic period he is inferior in rank to Brahma, Vishnu, and Siva. His heaven is called Swargaloka or Indra-loka, and his pleasure-garden or elysium, his city (sometimes placed on Mount Meru, the Olympus of the Greeks), his charioteer, his thunderbolt, his elephant, his bow (the rainbow) are all famed.

Nature-worship, with Indra as its chief deity, seems to have been holding its place until about B.C. 1500; but, in later mythologies, he is even vilified, and described as extremely licentious. And in the present state of Hinduism, in which every Hindu has a separate belief, and hero-worship, devil-worship, and lingam-worship are the prevailing forms, Indra is almost unheard of and unknown, is never invoked, and has been replaced by Vishnu and Siva, their wives and children and incarnations.

Amongst the earliest dissenters from Indra were the Yadu race under Krishna's influence. The Mahabharata makes Krishna say to Nanda, his adopted father, 'Why worship Indra as the Supreme God? O father! we are Vaisyas, and our cattle live upon the pastures, let us therefore

cease to worship Indra, and pay our devotions to the mountain Govardhana.' Up to that time, it was to the heaven of Indra that the good who died were believed to proceed.

These changes indicate the strife between sects as the present forms of Hinduism were being eliminated. In one myth, Indra is depicted, like Argus, covered with eyes, and is thus called the thousand-eyed god. Having become enamoured of Ahalya, wife of the rishi Gautama, the rishi discovered his intentions, and bestowed on the god his curse that his body should be covered in a very extraordinary manner, which, on the contrition of the offending deity, he changed into eyes.

It is related that on one occasion, in the form of a shepherd boy, Indra robbed the garden of a peasant. In this theft he was detected. The story is told in a hymn—

'The sage musician chanted;
He told how Sachi, soft as morning light,
Blythe Sachi, from her lord Indrani light,
When through clear skies their car ethereal rose,
Fixed on a garden trim her wandering sight,
Where gay pomegranates, fresh with early dew,
Vaunted their blossoms new;
Oh! pluck, she said, you gems, which nature dresses
To grace my darker tresses.
In form a shepherd's boy, a god in soul,
He hastened, and the bloomy treasure stole.
The reckless peasant, who those glowing flowers,
Hopeful of rubied fruit, had fostered long,
Seized, and with cordage strong
Shackled the god, who gave him showers.
Straight from seven winds immortal Genii flew,—
Varuna green, whom foamy waves obey,
Bright Vahni, flaming like the lamp of day,
Cavera, sought by all, enjoyed by few,
Marut, who bids the winged breezes play,
Stern Yama, ruthless judge, and Isa cold,
With Nairiti mildly bold;
They with the ruddy flash, that points his thunder,
Rend his vain bands asunder.
The exulting god resumes his thousand eyes,
Four arms divine, and robes of changing dyes.'

To understand these allusions, it must be remembered that the Hindus have assigned regents to each cardinal and intermediate point of the compass. Indra being esteemed the first of firmamental deities, and especially the ruler of the east, that point is reckoned first, and the others are thus ruled:—Agni, south-east; Yama, south; Nairiti, south-west; Varuna, west; Vayu, north-west; Kavera, north; Isa or Isani, north-east. To which are sometimes added three other quarters or points, viz. above, governed by Brahma; below, by Naga or Sesha Naga, the king of serpents, otherwise named Vauki; and the centre, ruled by Rudra or Siva.

Indra is called Sakra in consequence of being the evil adviser of the demons or asura, by whom he was so often driven from heaven; but also, with mythological inconsistency, Pakushasani, he who governs the gods with justice; Shatkratu, he to whom a hundred sacrifices are made; Vitraha, Bularati, and Numuchisadana, the destroyer of the giants; Urisha, the holy; Meghnadana, he who is borne on the clouds, etc., etc. Indra possesses the following blessings, produced at the churning of the ocean:—Kamdenu, the all-yielding cow; Pariyataka, the tree of plenty; and Uchisrava, the eight-headed horse. The princes of Kangti, the rajah of Assam, and other chiefs in the eastern parts of India, claim to have derived their origin from Indra.

One of his numerous names is Dyupeti, or, in

the nominative case, before certain letters, Dyupetir, which means the Lord of Heaven. He may be considered as the Jove of Ennius, in his memorable line—

'Aspicio hoc sublime candens, quem invocant omnes Jovem,' where the poet clearly means the firmament, of which Indra is the personification.

Indra is fabled to reside in the celestial city of Amravati, where his palace Vajrayanta is situated in the garden Nandana, which contains the all-yielding trees Pariyataka, Kalpadruma, and three others similarly bountiful. He rides the elephant Airavati, driven by his charioteer Matali, and he holds the weapon Vajra or the thunderbolt, and he is hence named Vajrapani. His chief musician is named Chitra-rat'ha, who rides in a painted car, which on one occasion was burned by Arjun, the confidential friend and agent of Krishna or the sun. The water-spout is said to be the trunk of his elephant, and the iris is appropriately called his bow, which it is not deemed auspicious to point out. Menu says, 'Let not him who knows right from wrong, and sees in the sky the bow of Indra, show it to any man.' His consort is Indrani, or Aindri, or Mahendri, also named Pulomaya, sometimes Powlumi and Sachi, and she is very virtuous as well as beautiful.—*Williams' Nala*; *Coleman*; *Menu*; *Moore*; *Cal. Rev.*; *N. Br. Rev.*; *Sir W. Jones' Hymn to Indra*, xiii. p. 275.

INDRABHUTI, son of Vasubhuti, one of the Gandharvas or masters of the Jain schools, the same with Gautama.

INDRADWIPA or Gandharvachanda, a division of the Old Continent. Has been supposed to be the Orkney Islands, but also Japan.

INDRAGIRI, a hill at Sravana Belgola in the south of India, has the oldest known Jain inscription. It records an emigration of Jains from Ujjain, under the leadership of Swami Bhadra Bahu, the last of the Sruta Kevalis, who was accompanied by Chandragupta, king of Pataliputra. Its date is supposed to be about the 3d century B.C.—*Growse*, p. 49.

INDRAJIT, in Hindu legends the conqueror of India. The term is Sanskrit, from Jee, to conquer. He was the bravest and most powerful of the sons of Ravana. In the war which Rama carried on against Ravana, Indrajit's bravery was very conspicuous, but at the close of the war he was slain by Lakshmana.

INDRA-LOKA, called also Swarga, the heaven of Indra, built by Visvakarma, a son of Brahma, and architect of the gods.

INDRAPRASTHA, an ancient town of Pandava, Kaurava, and Yadava times. Its ruins are pointed out half-way between Dehli and the Kutub. Indraprastha and Dehli were about five miles apart, the one on the Jumna, and the other on a rocky hill to the S.W. in the interior. Indraprastha does not appear to have been a famous place in the history of Buddha. The historians of Alexander and Seleucus also make no allusion to the princes of Indraprastha, which, however, was one of the five pat or prastha which had been demanded by Yudisthira as the price of peace between the rival Kuru and Pandava races, and which old Dhriti Rashtra gave away from his kingdom to his turbulent nephews. The principality assigned to them was a bit of forest land, then known under the name of Khandava-vana. The existence of Indraprastha in the 2d century A.D.

may, however, be recognised in the Indabara of Ptolemy; and Dehli may possibly be found in Ptolemy's Daidala, which is placed close to Indrabara (perhaps Indrapat), and midway between Modura or Mathura and Batan Kaisara or Sthan-eswara. The date of the occupation of Indraprastha as a capital, by Yudisthira, may be attributed, with some confidence, to the latter half of the 15th century B.C. Posterity can now hardly trace its site. The only spot that has any claim to have belonged to that ancient city, is a place of pilgrimage on the Jumna called the Negumbode Ghat, immediately outside the northern wall of the present city. Popular tradition regards this ghat as the place where Yudisthira, after his performance of the Aswa Medha, or the horse sacrifice, celebrated the Hom, and a fair is held at the ghat whenever the new moon falls on a Monday. Local tradition, however, in this instance, contradicts the Mahabharata, which states the Aswa Medha to have been performed at Hastinapura on the Ganges. The Negumbode Ghat may be the spot where Prithi-raj celebrated his Aswa Medha, but it had acquired a sacredness from before the time of that prince, and was a place of resort where his grandfather, Visal Deva, had put up an inscription to transmit the fame of his conquests. Humayun tried to do away with the name of Indrapat, and substitute that of Deenpana. None but pedantic or bigoted Muhammadans make use of this name. The common people either call it Indrapat or Purana Killa. Neither could Sher Shah have it called after him as Sherghar,—the voice of tradition is not easily silenced. The Purana Killa, as it now stands, is nearly rectangular in shape, and its walls are over a mile in circuit. In the interior of the Purana Killa is the Keelar Kona mosque, said to have been commenced by Humayun, and completed by Sher Shah. It has five horseshoe arches, decorated with blue tiles and marble, and is a favourable specimen of the architecture of the Afghan period. It is, perhaps, one of the most tasteful mosques in or near Dehli, and is remarkable for its richly inlaid work and graceful pendentives. The prevailing material of the centre arch is red cut sandstone and black slate, and towards the ground white marble and black slate, the carving throughout being very ornate. The two side arches are composed of simple red-stone, picked out with yellow glaze and black slate finely carved, the outermost arches are still plainer in construction, the outer walls changing from red to grey stone.—*Tr. of Hind.* ii. p. 130-145. See Dehli.

INDUR LATIB. PERS. A drug imported from Persia into the Panjab, supposed to be Nardostachys jatamansi.

INDUS.

Sam-po-ho, . . .	CHIN.	Sind'hu, the adjective
Sin-tow, . . .		Saind'hava, . . .
Sinthus, . . .	GR.	Sansk.
Tsang-po, . . .	LADAKH.	Sing-ge-chu or Lion
Aba-Sin, . . .		river, . . .
Sindus, . . .	"LAT.	TIBETAN.
Nu-ab, . . .	PERS.	Sinh-ka-bab or Lion's
		mouth-descended, ..

The source of the Indus is in lat. 31° 20' N., and long. 80° 30' E., at an estimated height of 17,000 feet, to the N.W. of Lakes Manasarowara and Rawan H'rad in the southern slopes of the Gangri or Kailas mountains, a short way to the eastward of Gartop (Garo). The Garo river is the Sing-ge-chu or Indus. From the lofty moun-

tains round Lake Manasarowara, spring the Indus, the Sutlej, the Gogra, and the Brahmaputra. A few miles from Leh, about a mile above Nimo, the Indus is joined by the Zaskar river. The valley where the two rivers unite is very rocky and precipitous, and bends a long way to the south. From this point the course of the Indus, in front of Leh and to the S.E. for many miles, runs through a wide valley, but the range of mountains to the north sends down many rugged spurs. A little lower, the Indus is a tranquil but somewhat rapid stream, divided into several branches by gravelly islands, generally swampy, and covered with low Hippophae scrub. The size of the river there is very much less than below the junction of the river of Zaskar. The bed of the Indus at Pitak, below Leh, has an elevation of about 10,500 feet above the level of the sea, but the town is at least 1300 feet higher. From the sudden melting of accumulations of ice, and from temporary obstacles, occasioned by glaciers and avalanches in its upper course, this river is subject to irregularities, and especially to debacles or cataclysms, one of which, in June 1841, produced terrific devastation along its course, down even to Attock.

At the confluence of Sinh-ka-hab with the Shyok, the principal river which joins it on the north from the Kara-korum mountains, the river takes the name of Aba-Sin, Father of Rivers, or Indus proper, and flows then between lofty rocks, which confine its furious waters, receiving the tribute of various streams; and at Acho, expanding into a broader surface, it reaches Derbend, the N.W. angle of the Panjab, where (about 815 miles from its source) it is 100 yards wide in August, its fullest season. From Derbend it traverses a plain, in a broad channel of no great depth in Attock, in lat. $33^{\circ} 54' N.$, long. $72^{\circ} 18' E.$, having, about 200 yards above this place, received the river of Kābul, almost equal in breadth and volume, and attains a width of 286 yards, with a rapid boiling current, running (in August) at the rate of six miles an hour. The breadth of the Indus at Attock depends not only upon the season but the state of the river upwards, and varies from 100 to 260 yards. The whole length of its mountain course, from its source to Attock, is about 1035 miles, and the whole fall is 16,000 feet, or 15.4 per mile. From Attock to the sea the length is 942 miles, making its whole length, from the Kailas mountain to the Indian Ocean, 1977 miles. Its maximum discharge, above the confluence of the Panjab or Five Rivers, occurs in July and August, when it is swollen by the seasonal rains, and it then reaches 135,000 cubic feet, falling to its minimum of 15,000 in December.

In the Tilietan of Ladakh it is commonly designated Tsang-po, or the river, and is the Sampo-ho of the Chinese Pilgrim Hiwen Tshang, who travelled in the middle of the seventh century.

Below the junction of the Panjab rivers down to Schwan, the Indus takes the name of Sar, Siro, or Sira; from below Hyderabad to the sea it is called Iar; and the intermediate portion is called Wicholo (Hich, HINDI), or Central, representing the district lying immediately around Hyderabad, just as, on the Nile, the Wustani, or Midlands of the Arabs, represents the tract between Upper

and Lower Egypt. Sir A. Burnes mentions that Sar and Lar are two Baluch words for north and south. The Indus or Sind has been called by that name from time immemorial to the present day, by the races on its banks. The ancients knew that this was the native appellation. P'liny (lib. 6, vi.) says, 'Indus incolis Sindus appellatus.' The Chinese call the river Siu-tow.

From Attock the course of the Indus to the sea, 940 miles, is S. and S.W., sometimes along a rocky channel, between high perpendicular cliffs, or forcing its way, tumbling and roaring, amidst huge boulders, the immense body of water being pent within a narrow channel, causing occasional whirlpools, dangerous to navigation, to Kalabagh, in lat. $32^{\circ} 57' N.$, long. $71^{\circ} 36' E.$, situated in a gorge of the great Salt Range, through which the river rushes forth into the plain. In this part of its course it has acquired the name of Nil-ab, or Blue Water, from the colour imparted to it by the blue limestone hills through which it flows. There are some remains of a town on the bank of the river, named Nil-ab (where Timur crossed the Indus), supposed to be the Naulibus or Naulibe of Ptolemy. At Kalabagh the Indus enters a level country, having for a short time the Khusuri Hills, which rise abruptly on the right. It now becomes muddy, and as far as Mittunkote, about 350 miles, the banks being low, the river, when it rises, inundates the country sometimes as far as the eye can reach. Hence the channels are continually changing, and the soil of the country being soft,—a mud basin, as Lieutenant Wood terms it,—the banks and bed of the river are undergoing constant alterations. These variations, added to the shoals, and the terrific blasts occasionally encountered in this part of the river, are great impediments to navigation. The population on its banks are almost amphibious; they launch upon its surface, sustained by the inflated skins or mussaks, dried gourds, and empty jars used for catching the celebrated pulla fish, the Hilsa of Bengal.

At Mittunkote the Indus is often 2000 yards broad, and near this place, in lat. $28^{\circ} 55' N.$, long. $70^{\circ} 28' E.$, it is joined, without violence, by the Panjnad, a large navigable stream, the collected waters of the Sutlej, Beas, Ravi, Chenab, and Jhelum. Its true channel, then a mile and a quarter wide, flows thence through Sind, sometimes severed into distinct streams, and discharges its different branches by various mouths into the Indian Ocean, after a course of 1977 miles. The Indus, when joined by the Panjnad, never shallows, in the dry season, to less than 15 feet, and seldom preserves so great a breadth as half a mile. Keeled boats are not suited to its navigation, as they are liable to be upset. The Zoruk, or native boat, is flat-bottomed. Other boats are the Dund, Dund, Kotai, and Jumti. Gold is found in some parts of the sands of the Indus.

The shore of its delta, about 125 miles in extent, is low and flat, and at high tide, to a considerable distance inland, overflowed; and generally a succession of dreary, bare swamps.

In the mouths of the Indus, the tides rise about 9 feet at full moon, and flow and ebb with great violence, particularly near the sea, when they flood and abandon the banks with incredible velocity. At 75 miles from the ocean they cease to be perceptible.

Between the Seer and Kori mouths, at the S.E. of the delta, it is overspread with low mangrove jungle, running far into the sea, and from the Seer is a bare, uninhabited marsh. The main stream of the Indus has discharged its waters at many points between Cape Monze, immediately west of Kurachoe and the Gulf of Cutch, if not even that of Cambay. Pitti, Hajamri, and Kediwari, now sea-channels and tidal creeks, shut off from the river, except during the monsoon, are all former mouths of the Indus. The Buggaur or Gharra is still a considerable stream during the inundation; it takes off from the Indus close to Tatta.

The languages spoken on the N.W. border of India are dialects of Hindi, but sufficiently distinct to be called Sindi, Panjabi, and Kashmiri. Lieutenant Leech, indeed, has given vocabularies of seven languages spoken on the west of the Indus. The western border tribes are still mostly under patriarchal governments. In the more southerly are the various Baluch tribes in the territories to which they give their name, and whose language is said by Captain Raverty to be a mixture of Persian, Sindi, Panjabi, Hindi, and Sanskrit. The Brahui tribes in Saharawan and Jhalawan, whose great chief is the khan of Khilat, ethnologists consider to be of the same Scythic stock as the Dravidian races in the Peninsula, and infer from this that the passage of some of the Dravidian tribes from Turan was along the valley of the Indus. The Brahui physical type is Scythic, and the language has strong Dravidian affinities. The Brahui is a genuine representative of the pre-Indian population of S.E. Irania or Baluchistan. The Jat of the Lower Indus appear to be of the same race as the Brahui, and are almost black.

The principal towns on the banks of the Indus river are Leh, Attock, Kalabagh, Dehra Ismail Khan, Dehra Ghazi Khan, Mittunkote, Hyderabad.—*Captain Carless; Lieut. Wood; Dr. Lord; Cunningham; Findlay; Elliot; Hist. of the Panjab.*

INDUVANSA, also known as the Lunar race, a race who, in pre-historic times, were dominant in Northern India. In the Raj Tarringini and Rajaoli, the Induvansa family are shown to be descendants of Pandu, through his eldest son Yudishthra. These works, celebrated in Rajwara as collections of genealogies and historical facts, were compiled by the pandits Vedyadhra and Ragonath, under the eye of the most learned prince of his period, Siwai Jai Singh of Amber, and give the various dynasties which ruled at Indraprastha, from Yudishthra to Vikramaditya. The Tarringini commences with Adinath, or Reshabdeva, being the Jain theogony. Rapidly noticing the leading princes of the dynasties discussed, they pass to the birth of the kings Dhriti Rashtra and Pandu, and their offspring, detailing the causes of their civil strife, to that conflict termed the Mahabharata or great war. On the death of Pandu, Duryodhana, nephew of Pandu (son of Dhriti Rashtra, who from blindness could not inherit), asserted their illegitimacy before the assembled kin at Hastinapur. With the aid, however, of the priesthood, and the blind Dhriti Rashtra, his nephew Yudishthra, elder son of Pandu, was invested by him with the seal of royalty, in the capital of Hastinapur. But Duryodhana's plots against the Pandu were so numerous, that the five brothers determined to

leave for a while their ancestral abodes on the Ganges. They sought shelter in countries about the Indus, and were first protected by Drupdeva, king of Panchalica, at whose capital, Kampilnagara, the surrounding princes had arrived as suitors for the hand of his daughter Drupdevi. But the skill of Arjuna in archery obtained him the fair, who 'threw round his neck the burmala or garland of marriage.' The disappointed princes indulged their resentment against the exile; but from Arjuna's bow they suffered the fate of Penelope's suitors, and the Pandu brought home his bride, who became the wife in common of the five brothers; manners decisively Scythic. This marriage is glossed over, admitting the polyandry, but, in ignorance of its being a national custom, childish reasons are interpolated. In the early annals of the same race, predecessors of the Jeysulmir family, the younger son is made to succeed; also a Scythic or Tartar custom.—*Tod's Rajasthan*, i. pp. 47, 48.

INFANTICIDE.

Kindermord, . . . GER. | Infanticidio, . . . IT., SP.
Down to comparatively recent historic times, the Phœnicians, Carthaginians, Aramœans, Syrians, Babylonians, and even Israelites, and their neighbours on both sides of the Jordan, sacrificed their children with the hoped-for object of averting any great and serious misfortune. There is a Phœnician legend of El, the strong, offering up his son Yedud or Yedid, the beloved. El being the Kronos (Bunsen iii. 286), Malekh Bel was the same as the Tyrian Hercules, or Moloch, or Bal-Moloch, to whom, as also to Hecate and Melekhet Artemis, dogs were sacrificed. The principal sacrifices offered to Hercules Usu, as well as to his mythical companion, were human beings, which, in Laodicea of Phœnicia, might be ransomed by a doe. At Carthage, the practice of sacrificing their favourite children, and those of the highest rank, in honour of Hercules, continued down to their latest wars. The legend of the Grecian Hercules is, that he became insane, burned his own children, as well as those of his twin-brother Iphicles, and murdered his guest Iphitus (Bunsen iv. 212, 213). The Greeks exposed their children on the highways to periah with hunger, or to be devoured by beasts of prey, and that barbarous practice was sanctioned by some of their most celebrated lawgivers. Among the Romans, the custom of infanticide also prevailed. It is probable, says Malthus, that when Solon permitted the exposing of children, he only gave the sanction of law to a custom already prevalent. Of all the states of Greece, the Thebans are mentioned by Ælian as the only exception to the general practice of exposing infants at the will of their parents. By the other states of Greece, infanticide was sanctioned and regulated by law, under legal provisions for the regulation of this practice. Malthus (vol. i. p. 291) in a note says: 'How completely the laws relating to the encouragement of marriage and of children were despised, appears from a speech of Minucius Felix, in Octavio (cap. 30): 'Vos enim video procreatos filios nunc feris et avibus exponere, nunc adstrangulatus misero mortis genere elidere: Sunt quæ in ipsis visceribus medicanibus epotis originem futuri hominis extinguunt et parricidium faciunt ante quæm pariant.' This crime, he adds, had grown so much into a custom

in Rome, that even Pliny attempts to excuse it: *Quoniam aliquarum fecunditas plena liberis tulivenia indiget* (iv. xxix. cap. iv.).

Among the Canaanites, the Phœnicians, and the Carthaginians, the sacrifice of children was prescribed as a propitiation to their sanguinary deities Moloch and Kronos.

Moses forbade, under penalties of death, the ceremony of passing children through the fire to Moloch; but down to the time of Manasseh it was nevertheless practised among the Jews, and the king sacrificed his own son. Jephthah consecrated a victory by burning his daughter. The Greek fleet was detained at Aulis till Iphigenia had been murdered. And when Tacitus tells us of the German children being embarked in a shield on the face of the river, he is probably referring to the same act. Female infanticide was common over all Arabia in the time of Mahomed, and is frequently reprobated in the Koran. It was Mahomed who put a stop to the inhuman custom, which had been long practised by pagan Arabs, of burying their daughters alive, lest they should be reduced to poverty, or else to avoid the displeasure and disgrace which would follow if they should happen to be made captives, or to become scandalous by their behaviour; the birth of a daughter being for these reasons reckoned a great misfortune, and the death of one as great a happiness. The manner of their doing this is differently related; some say that when an Arab had a daughter born, if he intended to bring her up, he sent her clothed in a garment of wool or hair, to keep camels or sheep in the desert; but if he designed to put her to death, he let her live till she became six years old, and then said to her mother, Perfume her and adorn her, that I may carry her to her mothers; which being done, the father led her to a well, or a pit dug for that purpose, and having bid her look down into it, pushed her in headlong as he stood behind; and then filling up the pit, levelled it with the rest of the ground. But others say that when the woman was ready to fall in labour, they dug a pit, on the brink whereof she was to be delivered, and if the child happened to be a daughter, they threw it into the pit, but if a son, they saved it alive. This custom, though not observed by all the Arabs in general, was yet very common among several of their tribes, and particularly those of Koreith and Kendeh, the former using to bury their daughters alive in Mount Abu Dalama, near Mecca. In the time of ignorance, while they used this method to get rid of their daughters, Sasaa, grandfather to the celebrated poet Al Farazdak, frequently redeemed female children from death, giving for every one two she-camels big with young, and a he camel; and hereto Al Farazdak alluded when vaunting himself before one of the khalifs of the family of Meysa, he said, I am the son of the giver of life to the dead; for which expression being censured, he excused himself by alleging the following words of the Koran:—'He who saved a soul alive shall be as if he had saved the lives of all mankind.'

Europeans, at their settlement in America, found female infanticide still practised among some of the tribes; and the Abbé Dubois mentions that it was customary to expose or put to death children born under stars supposed to possess a particularly malignant influence.

Dillon, who went in search of La Perouse, mentions that the women of Tucopia were at least treble the males; all the male children, except the two eldest, being strangled on their birth, while all the girls were allowed to live.

When Captain Wallis visited Otaheite and the neighbouring islands in the South Sea, the practice was unhesitatingly avowed by the lascivious Eereois societies in these islands.

Dr. Bonnett tells us (i. p. 122) that infanticide was practised by the women of Australia and New Zealand, on infants born after a severe labour, and on half-caste infants.

Infanticide of female infants has been practised in India from unknown times amongst the ancient Gakkar race in the Panjab, and it has been a constant custom, and has continued in several parts of India down to the latter third of the 19th century. It was long supposed to have been confined to the clans of the Rajkumar or Rajavansa tribe, who inhabit districts in the neighbourhood of Benares; but a larger knowledge disclosed the existence of a similar practice among several tribes in Gujerat, all through Rajputana, also in the N.W. Provinces, in Oudh, Cutch, and west of the Indus in Baluchistan. Mr. Duncan was the first who brought the prevalence of infanticide to the notice of the British rulers of India. He became acquainted with its existence in 1789 while at Juanpore, and he induced the Rajkumar tribe, who practised it, to enter into a covenant to discontinue the horrid practice, which the covenant recognised to be condemned in the *Brâhmana Bywar Purana* as a great crime. The races with whom it has been customary to sacrifice their female children, are the Jut or Jat, the Rahtor Rajputs of Jeypore and Jodhpur, the Jahreja Rajputs of Cutch, and the Rajkumar race, the Sourah of Ganjam, and the polyandric Toda race on the Neilgherries.

The Rajkumar and Rajavansa, in a portion of the territories of Oudh and the adjoining provinces, and the Jahreja, in the countries of Cutch and Gujerat, on the western side of the Peninsula of India, alleged that the practice of female infanticide had existed for 4900 years; and the late General Walker, in an account published by Major Moor early in the 19th century, estimated the number of deaths of female children annually, in Cutch and Gujerat only, at no less than 30,000.

The Government of India, during the Marquis Wellesley's administration, in 1802, declared it to be punishable by law. But this proclamation was only partially successful.

In 1821, all surplus of fines levied on the Kattyawar chiefs, was thrown into a fund to provide dowers for unmarried girls, and this was followed by the Gaekwar in 1825. Little success resulted; and in 1834, Mr. J. P. Willoughby arranged to take a census and to put in force measures to prevent the Jahreja and others from destroying their female infants. The practice as a recognised custom ceased, the last conviction having been in 1854, and in 1872 there were in Kattyawar 10,461 males to 9513 females.

After the conquest of the Panjab by the British, Mr. C. Raike called a public meeting of the sirdars and chiefs at Amritsar; the meeting recognised as the causes for killing their female children, the expenses of marriage, for dowers, and for the exactions for the Bhat, the Rai, the Dut, the Bhand,

the Nai, the Merasi, and other beggars; and the meeting resolved to discontinue and suppress the practice. Indeed, among the many pressing measures of reform stopped by the mutiny, was the passing of an Act, actually draughted, to prevent and punish the crime of female infanticide. In 1856, Mr. Moore, a special commissioner, had made the most startling revelations as to the prevalence of the crime in the Buxi district. The subject was overlooked till 1867, when Mr. Hobart was sent into the same district to report whether, as was supposed, the practice had abated since 1856. Instead of this, he discovered that the houses of certain Rajput clans were floored with skulls, and the tanks choked with infants' bones. Sir William Muir at once put repressive measures in force, and applied to the Government of India for immediate legislation. Mr. (Sir John) Strachey accordingly moved for leave to introduce a Bill.

In Cutch in 1840, at the request of the Rao, the chiefs bound themselves to measures of repression. In 1840 there were 4912 males and 335 females, but in 1873 the Jahreja males were 8371 to 4272 females, and the Rao expressed his determination to repress this crime. In Palampur and Mahikanta, and among the Kunbi of Gujarat, the success was great. In 1840 there were only three girls alive amongst 35 clans residing in 95 villages in the southern portion of the Allahabad district. In 1843 it was found that not a single daughter existed amongst the great dominant clan of Chauhan Rajputs at Mainpuri. In the latter case, shortly after the determined efforts of a collector to put down the vice at any cost, there was a wonderful change effected; and it was found that in the year 1864 there were 1284 Chauhan girls living.

In March 1870 an Act was passed for the repression of infanticide. The rules sanctioned by this Act are very simple and precise. Certain districts or clans are proclaimed. A careful census is taken, and a nominal register is prepared, showing the names of all the members of a family. In this register, each birth, marriage, and death is recorded, the midwife, head of the family, and village night-watchman being responsible for the accuracy of such a record, and for duly reporting any event to the police. A tribe or district is to be held guilty if the female children do not average 40 per cent.—10 per cent. being allowed for certainty's sake, although of course a higher ratio would be more strictly in accordance with the natural proportion. Further, the report tells us, 'the minimum number to which the ratio might safely be applied, was fixed at 25; and where out of that number of children only 40 per cent. are females,—i.e. where there are 10 girls to 15 boys,—the ratio may be accepted as a *prima facie* indication sufficient to warrant the surveillance contemplated by the rules.'

But as it was found in some districts that the average of the female population of girls was only 25 per cent., stronger rules were to be at once enforced, every pregnancy was to be reported by the village midwife and night-watchman, and the police were ordered to be on the alert to detect even the attempt to commit crime. Even the heads of families could be obliged to report pregnancies to the Local Government, were such a step necessary to uproot the evil.

In the *N.W. Provinces*, in 1874-75, girls were only 30.9 per cent. of the total infants.

In *Oudh*, from a census of 649 villages in 1875-76, infanticide seems to have been discontinued amongst Rajput children; but in the *N.W. Provinces* there were 3113 villages, with a population of 393,529 souls, and there were birth reports of 4.08 per cent. more boys, showing a supposed concealment of girls born.

In *Kattyawar*, in the year 1875-76, taking all the Rajput tribes, there were 90.70 females to 100 males. The Jahreja tribe in 1872 had 90.93 females, and in 1875-76, 91.39. The death-rate among male infants in 1875-76 was 15.59 per cent. on the total number of male births, and among females, 15.19 per cent. The number of unmarried Rajput girls in 1874-75 was 15.08, and in 1875-76 it was 15.45.

In *Cutch*, however, in 1875-76, the percentage of infant deaths to births among males was 18.30, and among females, 31.13, against 25.47 and 30.05 in 1874-75.

In *Palampur* the percentages were 10.52 and 12.90 respectively, against 7.69 and 26.47 in 1874-75; and in *Mahikanta*, 16.32 and 36.66, against 6.45 and 27.45.

In the first half of 1872-73, 150 persons were punished in India under the Infanticide Act. In 1875, 27 districts in the *N.W.* were under the infanticide rules. On the 1st of April 1875, there were found in the proclaimed villages 80,235 boys to 32,759 girls, in the proportion of 71.1 to 28.9. The returns on 1st September 1874 showed 82,400 boys to 35,157 girls (not including arrivals and removals), in the ratio of 70.1 to 29.9. The minor population has risen from 12,994 to 117,537, the boys having increased by 2.7, and the girls by 6.9 per cent., in the ratio of 28 to 72 per 100.

Female infanticide, by violent measures, has greatly decreased among the Jat tribes, but many children are allowed to die by neglect. With them the great cause of the crime was the excessive expenditure for their marriage, but this has been greatly curtailed.

The phase which the crime once presented in Southern India was quite different from that which is now presented by the same crime amongst the northern Rajputs. Infanticide in Southern India, it is believed, used to be practised chiefly amongst the caste of temple dancing-women, and, strange to relate, led to the murder, not of female, but of male children. This was remarkable. Infanticide in India has always, generally speaking, meant the murder of girls, so that the expense (so crushing to Hindus, to whom marriage means feasting and lavish expenditure) of wedding them to the sons of neighbours might be avoided by poor parents. But in the case of the caste of temple women, females were profitable, whilst male children were useless. So the new-born male infant used to be cast into some particular well or secret receptacle, whilst the girls were trained from infancy to read, sing, dance, adorn themselves, enjoy the emoluments of the temple, and take part in the worship of the god.

It was the custom of the Talpur dynasty of Sind to put to death all children born to the princes of slave women. Dr. James Burnes was informed that one member of the family alone had destroyed 27 of his illegitimate offspring.

Dr. Cooke saw mummy-like bodies of infants in a cave in Bhagwana in Baluchistan, some of which had a comparatively recent appearance.

Infanticide of girl infants was common in Saur-rada, by entombing them alive, or wrapping them in cloth, and so burying them. It was put an end to by Colonel (Sir John) Campbell about the year 1848. The Kandh killed their own girls, and then purchased wives from other parts of the country.

Infanticide was greatly condemned by the Sikh Guru Govind, who says, 'With the slayers of daughters whoever has intercourse, him do I curse.' And again, 'Whosoever takes food from the slayers of daughters, shall die unabsolved.' Nevertheless, the Bedee race of the Sikhs, the hereditary priesthood, who are to be found all over the Panjab, adopted this mode of disposing of their daughters, from religious pride leading them to regard with horror the idea of giving their daughters to persons of inferior rank.

In the total population of British India of 253,891,821, the males, in 1881, numbered 129,941,851, and females 123,949,970, or six millions less.

In four provinces or states the females were in excess, viz. :—

	Males.	Females.
Bengal,	34,625,591	34,911,270
Madras,	15,421,043	15,749,588
Mysore,	2,085,842	2,100,346
Travancore,	1,197,134	1,204,024

In every other province the males were more numerous, and in the following four greatly so :—

	Males.	Females.
Coorg,	100,439	77,863
N.W. Provinces and Oudh,	23,297,255	21,552,364
Panjab,	12,322,356	10,389,764
Rajputana,	5,544,665	4,723,727

Under Act viii. of 1870 for the suppression of female infanticide, small sections of the Ahir, Ahar, Taga, Jat, Rajput, Gujar, and Mina, aggregating about 350,000 persons, were proclaimed in various parts of the N.W. Provinces and Oudh.

The suspected castes consist mostly of well-to-do agriculturists, amongst whom the 1881 census shows the following proportion of females to 100 persons :—

Age.	Absolute Numbers.				Percentage of Females to Persons in same Age Group.	
	Males.		Females.		Susp. Castes.	Other Hindus.
	Susp. Castes.	Other Hindus.	Susp. Castes.	Other Hindus.		
0 to 9	946,591	3,997,556	833,565	3,800,626	46·82	48·74
10 „ 19	834,350	3,137,476	699,857	2,438,194	41·83	43·75
20 „ 29	717,688	2,780,553	605,641	2,709,161	46·76	49·81
30, etc.	1,452,040	5,502,975	1,307,307	5,484,251	47·30	49·91
Total.	3,951,273	15,368,559	3,346,290	14,432,332	45·85	48·43

The census report of 1881 shows, as under, the percentage of females in age group :—

Caste.	20 and up.	Under 5.	Caste.	20 and up.	Under 5.
Mina,	46·25	52·72	Jat,	44·6	44·9
Ahir,	49·15	49·40	Rajput,	45·2	47·5
Gujar,	42·5	45·4	Ahar,	46·5	47·0
Taga,	43·5	46·8			

Among the last five castes there still is neglect of female infants, though during the last ten years the high mortality amongst the Rajput, Taga, and Gujar must have considerably abated; but among the Ahar and the Jat there has been little, if any, improvement. During the five years 1876 to 1879 inclusive, the birth-rate of the proclaimed castes fluctuated from 32·7 to 48·3 per 1000 of the population.

Infanticide at one time was prevalent in the

Kandyan country, from poverty, being born under an evil star, and illegitimate children.

The Chinese have complete power over their offspring, even to life. In China, and also in Japan, infant murder is at the present time prevalent. In the great cities of Peking and Canton, Sir George Staunton found the exposure of children to be very common. Among the Chinese, however, it is ascribed to their extreme poverty, and it is more prevalent in the southern coast provinces than in the northern and midland. There are towns and districts in China where infanticide is practised, in some instances to an infamous extent, in others to a less degree. There are others, again, where it is not known at all as a habit, and Mr. Medhurst believes that in the majority of cities it is a crime no more frequent than in some European towns, and then only to conceal frailty. The Government of British India, and their officers engaged in the census-takings of 1872 and 1881, have been directing much attention to this subject, and the present position will be found described at p. 237 of article India, and p. 354 of Rajputs.—*Medhurst, Far. Cathay*, p. 90; *Browne on Infanticide*; *Cormack's Female Infanticide*; *Cole. Myth. Hind.*; *Malcolm's Persia*; *Burnes' Sind*; *Calcutta Review*, 1871; *Govind Rehret Nameh*, extra to the *Grunth*; *Cunningham's Sikhs*; *Salé's Koran*, p. 54; *Abbé Dubois*; *Chatfield's Hindustan*; *Census Reports*; *Oriental Herald*, xv. p. 479; *Pr. R. A. Soc.* iii. p. 263; *Mor. and Mat. Prog.*, 1874-75, 1875-76.

INFANTS. Sons are greatly longed for by all the races inhabiting the south and east of Asia. A prevailing feeling regarding them is such as is expressed in Psalm cxxvii. 4, 5, 'As arrows are in the hand of a mighty man, so are the children of the youth. Happy is the man that hath his quiver full of them; they shall not be ashamed, but they shall speak with the enemies in the gate;' for most persons will hesitate to attack a large united family. But the desire in Asia is for male children. Amongst Hindus and Chinese, with both of whom spirit-worship largely prevails, sons are particularly longed for, in order to obtain from them duties to the names of their parents. The eastern custom of nursing a child from the hip or side, as in Isaiah lx. 4, is still continued, and a child born after vows, is still, as in Proverbs xxxi. 2, called the son of a vow. As in Genesis xxv. 6, the children of Muhammadans, born of a wife of humbler birth, or of a haram woman, are not deemed equal in social rank to the children of a high-born wife. Luke xviii. 15 says, 'They brought unto him also infants, that he would touch them.' When a Hindu spiritual guide (guru) visits a disciple, the latter takes his child to him for his blessing; placing the infant before the guru, and forcing its head down to his feet, the parent solicits his blessing, which he gives in some such words as these—'Live long; be learned; be rich.'

The usual blessing of a Muhammadan fakir, man or woman, is Jio-baba, Live, my child; Jio, sahib, Live, sir; Jio-bibi, sahib, hazrat Maryam ka saya, Live, lady, under the protection of the Lady Mary.

ING. BURM. A lake. Ing-khun, lake revenue.

Ing-tha-ma, lake fisher.

INGA BIGEMINA. Willde. Iron-wood.

Mimosa bigemina, Linn. | M. lucida, Ruel.

Bung-mai-zah, . . . BURM. | Katur konna, . . . BURM.

Ta-nyen, Tan yew, „

INGA DULCIS.

This tree grows in the Konkans, Nepal, Assam, and Pegu. It is of smaller girth than the *I. xylocarpa*, but grows to a great height, and has a black wood. Like the *I. xylocarpa*, it is called iron-wood by the English in Pegu and Tenasserim. In native gardens it is an ornamental tree, with sweet-scented blossoms, and affording a thick, beautiful shade. Its seeds are poisonous when taken internally, notwithstanding which they are sold at a high price in the bazar, and are used by Burmese and Karens as a condiment to their preserved fish.—*Roxb.*; *M'Clelland*; *Mason*.

INGA DULCIS. *Willd.*

<i>Mimosa dulcis</i> , <i>Roxb.</i>	<i>Pithecolobium dulce</i> , <i>Benth.</i>
<i>Manilla tamarind</i> , . <i>ENG.</i>	<i>Sima chinta</i> , . . . <i>TEL.</i>
<i>Curkapulli maram</i> , . <i>TAM.</i>	<i>Sima chinduga</i> , . . . "

This small tree from the Philippines is now grown in India, attains to 12 to 18 inches in diameter, and resembles the hawthorn in general appearance. It was introduced into the Philippine Islands, but was a Mexican tree, which the Spaniards introduced into the Eastern Archipelago. It furnishes a hard wood. It is a most valuable hedge plant, perhaps the best in India, and is now sparingly used along some of the railway lines of the Peninsula. The pulp of the fruit is edible. Pods curiously twisted.—*Voigt*.

INGA XYLOCARPA. *D. C.* Iron-wood.

<i>Mimosa xylocarpa</i> , <i>Roxb.</i>	<i>Acacia xylocarpa</i> , <i>Willd.</i>
<i>Xylia dolabriformis</i> , <i>Benth.</i>	
<i>Pyen-ka-do</i> , . . . <i>BURM.</i>	<i>Jamboo</i> , . . . <i>HIND.</i>
<i>Yerool</i> , . . . <i>CAN., MAHR.</i>	<i>Eruvalu</i> , . . . <i>TAM.</i>
<i>Jamba</i> , . . . "	<i>Malei averel</i> , . . . "
<i>Partridge wood</i> , . . . <i>ENG.</i>	<i>Tangodu</i> , . . . <i>TEL.</i>
<i>Boja of the</i> . <i>GODAVERY.</i>	<i>Konda tangedu</i> , . . . "

This valuable and stately timber tree blossoms during the hot season, at which period it is nearly destitute of foliage. It is abundant in the Walliar forests of Coimbatore, also in N. Canara, between Sircee and Yellapore, and is not uncommon in the seaboard forests of the Bombay Presidency, south of Panwell. In Canara and Sunda it is chiefly above the ghats in Soopeh and Dandele, where it grows large, and is very useful in house-building. It is met with in the Godavery forests, where it grows very large on the mountains, and there is much of it in the Vizagapatam district. In the southern forests of Pegu it is a plentiful large tree, 15 to 18 inches in diameter, very lofty and straight, with 6 to 9 feet in girth, and very abundant in Amherst, Mergui, and Tavoy.

The heart-wood of full-grown trees is of a dark colour, very hard and dense, strong and durable, etc. It is used for house and bridge posts, ploughs, boat anchors, for naves of cart-wheels, crooks for ships; knees and bends, posts, piles, and bridges; and is excellent for railway sleepers, etc. A cubic foot weighs 60 to 66 lbs. An inch bar of the Coimbatore wood sustained 550 lbs. Nails cannot be driven into it. It is as impervious to white ants as teak, and is even more durable in the ground. In the Madras Gun Carriage Manufactory it is used for poles, axle cases, and braces for transport limbers, poles and yokes for water-carts, cheeks, axle cases for transport carriages, light mortar carts. On the Madras Railway it has been employed extensively for piles, transoms, and walling pieces. In small scantlings, it is liable to split and warp under exposure to the weather.—*Drs. Roxb., Wight, M'Clelland, Brandis, Mason, Gibson, Cleghorn; Captain Dance; Mr. Rohde; Cat. Ex.; Voigt.*

INGOULETZ.

INGIE or Eugie. *BURM.* A white linen jacket used by Burmans.—*Winter's Burma.*

ING-LEET-MEN. *BURM.* An ambiguous expression adopted by Burmese as a salve to their pride, for use when compelled to hold intercourse with a dignitary who is not in their view an anointed king. It may apply to the Queen of England or to the Governor-General.—*Yule's Embassy.* *Qu. Englishmen.*

INGLIS. *HIND.* A pensioner. The word is a corruption of 'Invalids.' *Wilson* says it is meant for English.

INGOT, a small wedge-shaped mass of tin, copper, gold, or silver, etc., of an indefinite size and weight. About 40 ingots of tin go to the ton. In some countries ingots of the precious metals pass current, as silver in China. In Burma, gold and silver ingots, of half an ounce weight *avoir-du-pond*, form part of the local currency.—*Simmonds' Dict.*

INGOULETZ. On leaving its banks and travelling eastward over the steppe, are to be observed innumerable tumuli, which vary greatly in size; and one of unusual magnitude is generally surrounded by several of smaller dimensions. There can be no doubt that the larger tumuli are raised over the bodies of princes and heroes, and the minor sort cover the remains of the followers of their armies, or of their state. The expanse occupied by these monuments of the dead extend regularly to the very farthest stretch of sight. *Herodotus* declares these remote regions of sepulture to be regular places of interment for whole nations, and particularly mentions, that whenever the Scythians lost a king or a chief, they assembled in great multitudes to solemnize his obsequies; and, after making the tour of certain districts of the kingdom with the corpse, they stopped in the country of the *Gerrhi*, a people who lived in the most distant parts of *Scythia*, and over whose lands the sepulchres were spread. A large quadrangular excavation was then made in the earth (in dimensions more like a hall of banquet than a grave), and within it was placed a sort of bier bearing the body of the deceased prince. Daggers were laid at various distances around him, and the whole covered with pieces of wood and branches of the willow tree. In another part of the same immense tomb were deposited the remains of one of the late sovereign's concubines, who had been previously strangled; also his favourite servant, his baker, cook, horsekeeper, and even the horses themselves, all followed him to the grave, and were laid in the same tomb, with his most valuable property, and above all a sufficient number of golden goblets. This done, the hollow was soon filled and surmounted with earth; each person present being ambitious to do his part in raising the pile that was to honour his departed lord. About six miles from the ancient city of *Sardis*, near the lake *Gygeus*, was to be seen the great tumulus erected in memory of *Alyattes*, father of *Croesus*. It is described by *Herodotus* as of prodigious height, having a base of stones, on which three classes of people were employed to heap up its enormous bulk. In the time of *Strabo*, the remains were 200 feet high, and the circumference three-quarters of a mile. Several other tumuli surrounded it. This form of sepulture may be found all over the world; and how

INGUVA.

lasting it is, as a monument, may be gathered from the date of this very mound of Alyattes, which could not have been erected much less than 2400 years ago, Alyattes having been contemporary with Nebuchadnezzar, the king of Babylon who destroyed Jerusalem about 600 years before the birth of Christ. In some parts are found tumuli in distinct groups wide of each other; and in other places they appear singly, like solitary and silent watch-towers, at distant stations. About 7 miles S.E. of Hyderabad, in the Dekhan, is an immense plain covered with cairns and kistvaens.—*Porter's Travels.*

INGUVA; also Ingya, and Hingupatri. TEL. *Ferula asafoetida*; also applied to several *Gardenia*, some of which yield a medicinal gum, particularly *G. gummifera*, from which is produced the resin called *Dikamali*.

INITIATORY rites are practised by Brahmanical Hindus for the admission of a youthful member into their circle, the Gaitri being the sacred and secret words imparted. The Sikh religionists and Muhammadan pirs and fakirs also have their modes of initiation. The Chinese secret societies likewise use sacred rites. Many of the Australian tribes are similarly initiated amongst the men of their clans.—*Mucgillivray's Voyage*, i. p. 14. See *Tun Surana*.

INJADRI, or Satpura, range of low mountains running east and west to the south of the Nerbadda river.

INK, BLACK.

Black,	DA.	Mashi,	MALEAL.
Ink; Inkt,	DUT.	Tinta,	PORT., SP.
Encre,	FR.	Tschernilo,	RUM.
Dinte,	GER.	Masi,	SANSK.
Soahi, GUJ., HIND., PERS.		Blak, Schrif black,	SW.
Inchiostro,	IT.	Mye,	TAN.
Atramentum,	LAT.	Sira,	TEL.
Mangsi, Dawat,	MALAY.		

Printing ink, writing ink, marking ink, India ink, etc., are composed of different ingredients,—gall-nuts, copperas, gum, and logwood,—according to the purposes to which it is to be applied. That which is used by the Tamil writers in the Cutcheries is thus prepared. Half a seer of rice, burnt black, is well boiled in a seer and a half of water, till but one seer remains, then strain off the dregs. To this seer of burnt rice water is to be added two pollams of lac; boil them well together, and strain off the dregs. Half a seer of carpoo varnam or lamp-black, and half a pollam of vullam pisin or gum-arabic, are then to be well rubbed into a fine powder, and gradually added to the mixture of lac and burnt rice water, when the whole is rubbed together and well shaken at different intervals for the space of three days.

Muhammadans take of lamp-black and gum-arabic equal quantities, and pound them together into a very fine powder. This powder is then moistened with the juice of the pulp of the kuttalay or small aloe, and well rubbed at intervals for two days together, after which it is formed into little cakes, and dried on plantain leaves in the sun for use.

For a good writing ink, take of nut-galls 2 lbs., sulphate of iron 13 oz., gum-arabic 13 oz.; pound the galls, and take 14 bottles of water, of which take three-quarters and boil the galls in it for three hours in a large pot; cool and pour off the clear liquid, and strain the remainder (careful and repeated straining is the great secret of successful

INLAID WORK.

ink-making); take the remaining fourth of water, and dissolve the iron and gum, boil cloves in it to prevent fungi; make all to 15 bottles of fluid. Strain everything well. Black ink for printers is made of lamp-black, linseed oil, rosin, brown soap, and a small quantity of indigo. Blue ink is made with indigo. Red ink, Segapoo mye, TAM., is prepared by adding a little water to Shem pungie (red cotton), Lutlooka doodi, TEL., also by steeping and afterwards boiling chips of red dye-woods in vinegar.

Indian ink or China ink is a solid ink from China. That used in England by artists is made in Canton and Ngan-hwui; the best is made at Hwui-chau-fu, in the latter province. Pine branches are burned under a moveable roof of thatch, and the soot is carefully mixed with isinglass or boiling glue. Oil and rock-oil have also been burned to form a finer soot. It is always scented with musk. Corean ink is good. Good Indian (China) ink is put up in plain patterns; the best kinds are gilt all over. It should be bright when broken, free from grittiness when rubbed on the ink-stone, emit a strong scent, and render the writing glazed when dry. Chinese written documents may be soaked in water for some weeks without being washed, and linen marked with Indian ink will bear several washings.—*Ainslie, Mat. Med.* p. 175; *Smith; M. M. C.*

INLAID WORK is an art which dates from a remote period. It has been carried on in Bombay since the commencement of the 19th century, having been originally introduced from Hyderabad in Sind. It is said to have been introduced into Sind about twenty years earlier from Persia; its native seat is supposed to be Shiraz. From Bombay the work has been carried to Surat. The materials used in the work are:—A mineral green dye for dyeing the stag's horn. Tin wire (Kylacenotur), used in the ornamental veneering. Sandal-wood, ebony, and sappan-wood, used in the frame work, and sometimes entering into the ornamental veneer; ivory, always white. Stag's horn, dyed green with mineral dye, verdigris. Glue, for binding; Ahmadabad glue being esteemed far above all other kinds, including English. The tools employed are a wheel for drawing the tin wire into different shapes for the preparation of the ornamental patterns, saws of different kinds, files, chisels, drills, planes, and a square. The only mystery is in the portion of the work which appears inlaid, but which is not inlaid in the first sense of the term. The patterns are veneered on, and may be applied to any flat or gently rounded surface. The ornamental veneer is prepared by binding together rods of ivory, tin, sappan, ebony, and green-dyed stag's horn, of different shapes, often geometric. These rods are usually three-sided, cylindrical, and obliquely four-sided. They are arranged so as when cut across to exhibit definite patterns, and in the mass present either the appearance of rods or of thin boards, the latter being to be sliced down into borders. The primary rods are sometimes bound together before being sliced, so as to form more complex patterns. The patterns commonly found in Bombay ready prepared for use are:—

1st. *Chakra* (i.e. wheel), the smaller being of the diameter of a fourpenny bit, and the larger of a shilling.

*2d. Kutkee or hexagonal, being composed of obliquely four-sided rods, of ivory, ebony, or Mandal-wood, and of ebony, tin wire, puttung, and green-dyed stag's horn mixed.

3d. Trenkoonia gool (i.e. three-sided flower), a three-sided pattern composed of tin wire, ebony, ivory, puttung, and green-dyed stag's horn.

4th. Gul (flower), obliquely four-sided, and compounded as last. These are all for the central vincer. The border patterns are :—

5th. Teekee, round, and varying in size from a twopenny bit to a large pin's head, and used for the central patterns, as well as for bordering.

6th. Gundeerio (plumb, full), composed of all the materials used in this work.

7th. Ekdana (one grain), having the appearance of a single row of tin beads set in ebony.

8th, 9th, and 10th. Poree lehur, Sansoo-hansio and Porohansio, varieties of border ornaments not easy to distinguish from one another by mere description.

In 1860, about fifty manufacturers were established in Bombay; six had been settled there from periods varying from twenty-five to forty-six years. A few employ workmen, but the majority work for themselves, with the aid in many cases of a brother or son. The inlaid work resembles Tunbridge ware.

At Vizagapatam, in Madras, similar articles are made of ivory and stag's horn, with scroll-work edged in to suit European taste. At Manipuri, in the North-Western Provinces, wooden boxes are inlaid with brass wire. The chief seats of ivory-carving are Amritsar, Benares, Murshidabad, and Travancore, where any article can be obtained to order, from a full-sized palanquin to a lady's comb. Human figures in clay, dressed to the life, are principally made at Krishnagar, in Bengal, Lucknow, and Poona.—*Imp. Gaz. iv.*; *Dr. (Sir George) Birdwood.*

INOCARPUS EDULIS. Linn.

South Sea chestnut, ENG. | Maize, . . . TAHITI.
(Otaheite chestnut, . . . | Kato, . . . ,

A native of the Molucca Islands, and from thence introduced into the Botanic Garden at Calcutta in 1798, where in ten years the largest of them was 25 or 30 feet high. They blossom during the hot season, and ripen their fruit in August and September.—*Roxb. Fl. Ind.*

INSCRIPTIONS.

Aufschrift, . . . GER. | Inscrizione, . . . SR.
Inserzione, . . . IT.

We read in the Old Testament of writings, engravings, pens, and books,—in Exodus xxiv. 7, xxv. 16, and xxxii. 15, 16, at least 1500 B.C.; in Job xiii. 26, xix. 23, 24, perhaps about the same age; and subsequently in Psalms xl. 7, xlv. 1, lvi. 8, and lxix. 28, and in Proverbs iii. 3, at least 1000 years B.C.; but the first authenticated inscriptions in India are those of the 3d century before Christ, engraved at Kapurthigiri, Dhauli, Girnar, etc. In the ten books (Mandala) of 1017 hymns in the Rig Veda, the art of writing is not even alluded to. At the time when the songs of the Rishis were collected, there is no allusion to writing materials, whether of paper (papyrus) or bark (liber) or skins, nor is there any allusion to writing during the whole of the Brahmana period of Vedic literature. Even during the Sutra period all the evidence obtained from them but leads to the supposition that though the art of writing

then began to be known, the whole literature of India was still preserved by oral tradition. The statements of Megasthenes, and Strabo, and Nearchus, however, show that, in their times, the art of writing was known in India, and that it was practised before the time of Alexander's conquest; nevertheless the origin of the Indian alphabet cannot be traced back much beyond the date of Alexander's invasion. The Lalita Vistara, however, one of the canonical books of the Buddhists, describes Sakya Sinha's entry into the writing school (li-pi-sala), and the alphabet that he is described as learning is the common Sanskrit alphabet. But in the times even of Nearchus and Megasthenes, letters do not seem to have been a vehicle of literature. Nearchus describes the people as writing on compressed cotton, Megasthenes as making inscriptions on mile-stones, and Curtius says they wrote on the soft rind of trees. The inscriptions generally supposed to have been engraved by Asoka, 300 years before the present era, with a view to promulgate the doctrines of Buddha, are therefore the oldest literary remains of India, but are upwards of 1000 years later than the era when the tablets were engraved on Mount Sinai, and when the Assyrians and Babylonians had formed great libraries, and were recording on tablets their military and civil transactions.

Nearly all that we know of ancient India, and of the countries on its north-western borders, with their former conquerors and rulers, has been obtained by the investigations of learned men into the legends on the numerous ancient coins found in Afghanistan, the Panjab, and India; and from the inscriptions found engraved on rocks and pillars, and in caves, in various places in India, in Kabul, and throughout the ancient empires of Iran and Assyria; through Hadramaut and Oman, in several districts of N. Arabia, and through the north of Africa. These, with the more celebrated remains of Egypt, prove that literature was cultivated in those countries at a time when Europe was inhabited by painted or tattooed barbarians. Amongst others who have laboured to decipher these may be mentioned Wilkins, Jones, Colebrooke, H. H. Wilson, J. Prinsep, Dr. Mill, Norris, Dowson, Thomas, Bayley, Bhau Daji, Rajendra Lal Mitra, Rawlinson, Sir Walter Elliot, F. W. Ellis, Colonel Mackenzie, C. P. Brown, General Cunningham, James Fergusson, Dr. Burnell in the Asiatic Researches, and Journals of the Royal Societies, with Grotefend, Lassen, Burnouf, and Oppert.

Many facts in history have been made known by the coin legends and rock inscriptions, and among others the extension of a Macedonian empire over a great part of North-Western India, and the conquest of the island of Ceylon by a Buddhist sovereign of India, three centuries before the Christian era.

Not less interesting are the inscriptions in the ancient Persian language, in the Assyrian or cuneiform character, spread through the empire of the great Cyrus, which throw an important light on sacred as well as profane history. The clue to the discovery of the sense of these Persian records was obtained by Grotefend, Lassen, and Burnouf; and, partly aided by it, though much more by his own ingenuity, Sir Henry Rawlinson was able to decipher many of these ancient historical engravings.

It was Champollion who laid the foundation of the decipherment of the hieroglyphics; Anquetil, Duperron, and Burnouf are the fathers of Zend studies; Arabic and Syriac scholars in Germany are the direct or indirect pupils of Sylvestre de Sacy and Quatremere; in Chinese, Stanislas Julien stands alone; Assyrian was cultivated in France and in England, and subsequently taken up by German scholars. About 1868 the Academie des Inscriptions et Belles-Lettres decided to have its 'Corpus Inscriptionum Semiticarum' to collect in one work the Semitic inscriptions scattered throughout various books and periodicals, and more especially the Phœnician and Punic inscriptions. The first part of this Corpus contains fifty Phœnician inscriptions, with Latin translation and commentary by MM. Renan and J. Derenbourg. Of larger and complete inscriptions, one was found by M. de Vogue at Gebel (Byblos), in which it is reported that the King Yehomelek erected an altar in the temple in the 4th century B.C. Another is the Sidonic inscription on the sarcophagus of King Ashmonezar, which is one of the best preserved; it is also of the 4th century B.C. Most of the inscriptions (ten to fifty) are those found at Cyprus, the greater part of which are now in the British Museum. We find mentioned in them the following kings,—Pumyatton and Melekyaton, kings of Kittî (Cyprus), and Adil (Idalian), and Ptolemy, probably Soter (312 B.C.), to whom the monuments are consecrated, the god Resheph, probably identical with the biblical bené Resheph (Job v. 7), known on Egyptian monuments as the god Raspu. Æsculapius is called in some of those inscriptions Baal Merappe, 'Baal Sanator,' analogous with the Hebrew Raphael.

The inscriptions in Western Media on the Behistun or Baghistan tablets, record the political autobiography of Darius Hystaspes in the old Persian language, in the Babylonian, and also in the language of the Scythians in the Medo-Persian empire; and the translation of the Scythian portion of those inscriptions is distinctly of the Scythian, that is, Turanian group, as spoken in the 5th century B.C., though the people by whom it was spoken are believed by Professor Oppert and Mr. Norris to have been Medians. This Scythian part of the Behistun inscriptions bears a special relationship to the Ugro-Finnish family, which Dr. Caldwell considers to resemble the Dravidian dialects. He thinks that the ancient Scythic race, by which the greater part of Central Asia was peopled prior to the irruption of the Medo-Persians, belonged to the Ugrian stock, and not to the Turkish or the Mongolian.

1. *Rock Inscriptions* have been found, amongst other places, at Shahbazgarhi, Khalsi, Girnâr, Dhauli, Jangada (two separate edicts on Dhauli and Jangada rocks), Sahasaram, Rupnath, Bairat, Khandagiri, Deotek slab.
2. *Cave Inscriptions* have been found at Barabar, Nagarjuni, Khandagiri, Ramgarh.
3. *Pillar Inscriptions* have been found:—
Dehli pillar from Siwalik (Firoz Shah's Lat), five inscriptions, one called Queen's edict, and one the Kosambi edict.
Dehli pillar from Meerut.
Allahabad pillar.
Lauriya-Arara pillar (Radhia).
Lauriya, Navandgarh pillar (Mathia).
Sanchi pillar.

The inscription at Junagarh, discovered by

Colonel Tod in 1822, has three paragraphs more than that at Dhauli in Katak (Cutlack), discovered by Lieutenant Kittoe. Others have been discovered at Kapurdigiri and at Ganjam.

The fourteen edicts into which the Junagarh inscription is divided cover considerably over 100 square feet of rock. They are inscribed on the uneven surface of a huge rounded and somewhat conical granite boulder.

The records on the rocks and pillars and caves north-west of India, and in India itself, are in two characters, styled the Aryan or Bactrian, and the Lat or Budh. The term 'Lat' has been given because found on certain pillars (Lat, SANSK., a pillar) in Dehli, Allahabad, etc. The Lat or Budh or early Pali character is the same as the Aryan, but the forms of the letters differ from the Aryan, and the letters are larger. Inscriptions in these characters are engraved on rocks at Kapurdigiri in Afghanistan, at Cutlack, at Dehli on a pillar; also on pillars at Allahabad, Betiah, Muttiah, and Radhia.

A pillar near Dehli has been called the pillar of Firoz, after Firoz Shah, who reigned in Dehli A.D. 1351 to 1388. It has a more ancient inscription, and one with a more recent character below in Sanskrit, to the effect that Raja Vighra or Visala Deva had, in A.D. 1169, caused this pillar to be inscribed afresh to declare that the said raja who reigned over the Sikambhari had subdued all the regions between the Himavat and Vindhya. This pillar was erected to enjoin the doctrines of Buddha, but the reading of it somewhat differs from that of the others. Though resembling the Girnâr inscription in general purport, these inscriptions differ considerably in the structure of certain sentences. Both Mr. James Prinsep and Professor Wilson attempted translations of it.

The same Lat or Budh characters found on the pillars at Dehli, Allahabad, and elsewhere, are also found engraved on rocks. The ancient Budh alphabet is really the simpler and more elegant form of the refined Sanskrit.

The Allahabad inscription is similar to that at Dehli, but has four short lines additional. A stone lodged in the museum of the Asiatic Society at Calcutta, found at Bairath near Bhabra, between Dehli and Jeypore, has an inscription in the Budh character.

The same character is also found in two inscriptions at Junir, of which one is on the Nanah Ghat. It is in keeping with the inscription on the Dehli pillar and on the rock at Girnâr.

The Girnâr inscription was supposed by Mr. James Prinsep to be in the Pali language.

The inscriptions on the pillars at Dehli and Allahabad, and on the Tirhut pillars at Mathya and Radhia, on the rocks at Junagiri in Gujerat, and at Dhauli in Cutlack, were deciphered and translated by the remarkable ingenuity of Mr. James Prinsep. A supposed third version of the rock inscriptions (but in the Ariano-Pali character), which was found at Kapurdigiri, near Peshawur, has been carefully collated with the others by Professor Wilson. Many short inscriptions from Gaya, Sanchi, and Birat, as well as from the cave temples of Southern India, have also been published at different times. The edicts in the rock inscriptions contain the names of Antiochus, Ptolemy, Antigonus, and Magnas.

The *Aryan* or *Bactrian* character is that used in the inscriptions at Jellalabad, Manikhyala, and Kapardigiri on topes or tumuli, which are numerous for about 300 miles around.

Jalalabad is in the valley of Kābul, and contains many sepulchral topes, which also occur at Daranta and at Hidda or Idda in its neighbourhood. That at Jalalabad was opened by Mr. Masson, and the inscription makes mention of Kadiphes. It is in the *Aryan* character.

Manikhyala is situated near Jhelum, on the banks of the river of that name, called by the Greeks the Hydaspes. Many topes are there, one of which is 80 feet high, with a circumference of 320 feet.

These topes or tumuli, it is now admitted, are only cairns regularly built, and this mode of sepulture is supposed to be alluded to in the heaps and graves and tombs spoken of in Job xxi. 32, also xxx. 24, and in Jeremiah xxxi. 21; and cairns are still found scattered over all the northern parts of Europe and Asia, and down to Cape Comorin in Peninsular India.

Inscriptions on stones and on copper plates have also been met with all over Southern India, but few of them are of a date prior to the year 1000 of the Christian era, and the larger portion are much later. Some give valuable facts and the names of kings, but the bulk of them record matters of little importance. The *Lat* character occurs rarely in the southern part of the Peninsula, still it is the only one used on the sculptures at Amaravati, which have been described by the Rev. William Taylor and Mr. J. Fergusson; and Surgeon-General Balfour, while in charge of the Government Central Museum at Madras, advised the despatch to London of most of the sculptures which are now placed against the wall in the staircase of the British Museum.

An extensive collection of inscriptions was made by the late Colonel Mackenzie, Surveyor-General, which also the Rev. W. Taylor described.

In Malayala, as in other parts of Southern India, inscriptions occur in various ancient characters as well as in modern letters. The translation of the copper plate grant to the Syrian Christians, which is still in their possession, has been given in the *Journal of the Madras Literary Society*.

The inscriptions found in the south of India are in three alphabets,—the Chera, Chalukya, and Vengi. The first appears in Mysore in the second half of the 5th century; the oldest specimen of the Chalukya is of date about the first half of that century; the third is more modern.

The Portuguese at Goa took some inscriptions on stone to their native country, but Sir Charles Wilkins was the first to explain one (at Cintra), about the end of the 18th century. The earlier volumes of the *Asiatic Researches* contain several interpreted by Wilkins, Jones, and Colebrooke, and in the later volumes H. H. Wilson contributed many valuable articles on this subject. The *Journal of the Asiatic Society of Bengal* about 1830 (by the articles by J. Prinsep, Dr. Mill, and others) made immense progress; and of later years the same journal, the *Journals of the Royal Asiatic Society* and of the *Bombay Society*, have often done much to advance the study of the Sanskrit inscriptions of India; and Mr. Norris, Professor Dowson, Mr. Thomas, Mr. Bayley, Dr.

Bhau Daji, and Babu Rajendralal Mitra have been decipherers. In the south of India an immense number of inscriptions exist in the Dravidian languages, many of which are not inferior in antiquity or interest to most of the Sanskrit and Prakrit inscriptions of the north, though, with the exception of a few articles (in the *Madras Journal*), published by Sir W. Elliot, and containing the results of his own researches, and those of Mr. F. W. Ellis, nothing has been as yet made public. Colonel Mackenzie, however, at the beginning of this century, made an immense collection of copies of inscriptions, and to the disinterested labour of Mr. C. P. Brown we owe the existence of copies of this collection, which, though purchased by Government for an enormous sum, had been neglected and suffered to rot from want of a little care. Copies of inscriptions collected by Sir W. Elliot in the Canarese country were presented by him to the R. A. Society of London. General Cunningham has made large collections of copies of inscriptions in the north of India. His *Archæological Reports* contain the result of his inquiries.

To copy inscriptions on stone, brush off all dust or mud, and take a mould by applying to the surface stout unglazed paper, uniformly wetted with water, and forced into the irregularities by repeated and forcible strokes with a hard clothes brush.—*Dr. Burnell, A Few Suggestions; Fergusson. See Architecture; Delhi; Sculpture.*

INSECTIVORA, an order of mammals which in India is represented by genera of the families, Talpidæ, Soricidæ, and Erinaceidæ. Talpa micrura, macrura, and leucura of Nepal, Sikkim, Sylhet, Tenasserim, and Japan; Urotrichus talpoides of Japan; Sorex caeruleascens, murinus, nemorivagus, Griffithii, serpentarius, heterodon, saturatus, Tytleri, soccatus, niger, leucopus, Hodgsoni, Perroteti, micronyx, melanodon, Sikkimensis, oligurus, homourus, macrurus, and holosericeus, of various parts of India. The order may also be thus shown:—

Fam. Talpidæ, Moles. Talpa, 4 sp.; Urotrichus, 1 sp.
Fam. Soricidæ, Shrews. Sorex, 20 sp.; Soriculus, 1 sp.;
Crossopus, 1 sp.; Corsira, 1 sp.; C. Feroculus, 1 sp.; C. Myogales, 1 sp.
Fam. Erinaceidæ, Hedgehogs. Erinaceus, 7 sp.; E. Tupaia, 2 sp.
See Erinaceidæ; Mammalia; Soricidæ; Talpidæ.

INSECTS.

Hasharat, Hamat, ARAB.	Dadadam, Dadah, PERS.
Insecte, FR.	Khasht, Khashasat, . . .
Entoma, GR.	Zad, "
Kira, Kirm, Ghun, HIND.	Insecto, SP.
Surauri, "	Puchi, TAM.
Insetto, IT.	Purbu, TEL.
Insecta, LAT.	Bujek, TURK.

Insects are a class of invertebrate articulated animals, forming one of the four divisions comprised in the Arthropoda of naturalists, the four divisions being—

1. *Crustacea*.—Respiration by means of gills, or by the general surface of the body; two pairs of antennæ; locomotive appendages more than eight, borne by the segments of the thorax, and usually of the abdomen also. *Examples*—Crabs, lobsters, shrimps, wood-lice, etc.
2. *Arachnida*.—Respiration by pulmonary vesicles, by tracheæ, or by the general surface of the body; head and thorax united; antennæ absent; legs, eight; abdomen without locomotive appendages. *Examples*—Spiders and scorpions.
3. *Myriopoda*.—Respiration by tracheæ; head distinct;

the remainder of the body composed of nearly similar segments; one pair of antennæ; legs numerous. *Examples*—Centipedes and millepedes.

- I. **INSECTA**.—Respiration by tracheæ; head, thorax, and abdomen distinct; one pair of antennæ; three pairs of legs borne by the thorax; abdomen without limbs. The adult form (with a few exceptions) winged. *Examples*—Beetles, bees, wasps, flies, butterflies, locusts, cockroaches, earwigs, dragon-flies, ant-lions, May-flies, bugs.

The Insecta are divided by naturalists into the following sub-classes:—

- I. **AMETABOLA**.—Young not passing through a metamorphosis, and differing from the adult in size only; imago destitute of wings; eyes simple, sometimes wanting.
- II. **HEMIMETABOLA**.—Metamorphosis incomplete; the larva differing from the imago chiefly in the absence of wings, and in size; pupa usually active, or, if quiescent, capable of movement.
- III. **HOLOMETABOLA**.—Metamorphosis complete; the larva, pupa, and imago differing greatly from one another in external appearance. The larva vermiform, and the pupa quiescent.

I. The AMETABOLA are divided into the following orders:—

ORDER I. **ANOPLURA**.—Minute aptera, with the mouth formed for suction; two simple eyes, or none.

This order comprises insects which are commonly parasitic, and are known as lice (*Pediculi*).

ORDER II. **MALLOPHAGA**.—Minute aptera, in which the mouth is formed for biting, and is furnished with mandibles and maxillæ.

These insects are usually known as bird-lice, being generally parasitic upon birds, though sometimes upon mammals.

ORDER III. **THYSANURA**.—Apterous insects, usually with a masticatory mouth, and having the extremity of the abdomen furnished with locomotive appendages.

The most familiar members of this order are the *Podure*, or spring-tails.

II. The HEMIMETABOLA are divided into the following orders:—

ORDER IV. **HEMIPTERA**.—Mouth suctorial, beak-shaped, consisting of a jointed rostrum, composed of the elongated labium, which forms a jointed, tubular sheath for the bristle-shaped styliform mandibles and maxillæ. Eyes compound, usually with ocelli as well. Generally provided with two pairs of wings; but these are sometimes wanting.

This order is divided into the following two sub-orders:—

Sub-Order a. Homoptera.—The anterior pair of wings of the same texture throughout (membranous). The wings do not fold over one another when the insect is at rest. The three segments of the thorax are united in a mass, and the pro-thorax is generally shorter than the meso-thorax. There are ocelli between the compound eyes, and the antennæ are small, and composed of few joints. The females have an ovipositor of three-toothed blades.

In this section are the aphides, the scale insects (*Coccide*); the cicadas, the lantern-flies (*Fulgoro*), etc.

Sub-Order b. Heteroptera.—Anterior wings membranous near their apices, but chitinous towards the base, overlapping each other at the apex when at rest. The antennæ are moderate in size, and composed of a few large joints. The pro-thorax is the largest segment of the thorax. They are divided into two groups of the *Hydrocoriina* (water-bugs), and *Geocorina* (land-bugs).

ORDER V. **ORTHOPTERA**.—Mouth masticatory; wings four, sometimes wanting; the anterior pair mostly smaller than the posterior, semi-coriaceous, usually with numerous nervures, the interspaces between which are filled with many transverse reticulations; sometimes overlapping horizontally (cockroach), sometimes meeting like a house-top (grasshoppers). Posterior wings usually having their front portion of a different texture from their hinder portion, this latter being almost always more transparent, and when not in use,

folded longitudinally, resembling a fan. Posterior wings mostly wanting in the females of the *Blattide*. Antennæ usually filiform. Metamorphosis semi-incomplete (sometimes, however, the adult is apterous, when it is difficult to distinguish the larva, pupa, and imago).

This order includes the crickets (*Achetina*), grasshoppers (*Gryllina*), locusts (*Locustina*), cockroaches (*Blattina*), etc.

ORDER VI. **NEUROPTERA**.—Mouth usually masticatory; wings four in number, all membranous, generally nearly equal in size, traversed by numerous delicate nervures, having a longitudinal and transverse direction, and giving them a reticulated lace-like aspect. Metamorphosis generally incomplete, rarely complete. The larva active, hexapod, rarely with pro-legs.

This order includes the dragon-flies (*Libellulida*), caddis-flies (*Phryganeida*), May-flies (*Ephemera*), the ant-lion (*Myrmecleo*), termites, etc.

ORDER VII. **APHANIPTERA**.—Wings rudimentary, in the form of plates, situated on the meso-thorax and meta-thorax; mouth suctorial. Metamorphosis complete.

This order comprises the fleas (*Pulicida*).

ORDER VIII. **DIPTERA**.—The anterior pair of wings alone developed; the posterior pair of wings rudimentary, represented by a pair of clubbed filaments, called halteres or balancers. In a few the wings are altogether wanting; mouth suctorial. The metamorphosis is complete, the larva being generally destitute of feet. In some cases (e.g. the gnats) the pupæ are aquatic, and have the power of moving rapidly. In most cases, however, the pupæ are quiescent. The Diptera constitute one of the largest of the orders of the Insecta; the house-flies and flesh-flies (*Musca*), gnats (*Culex*), forest-flies (*Hippoboscæ*), crane-flies (*Tipulida*), and gall-flies (*Tabanida*), constituting good examples.

ORDER IX. **LEPIDOPTERA**.—Mouth suctorial, consisting of a spiral trunk. Wings four in number, covered with modified hairs or scales; wanting in the females of a few species. Nervures not very numerous, mostly longitudinal. Antennæ almost always distinct, and composed of numerous minute joints. This well-known and beautiful order of insects comprises the butterflies and the moths.

ORDER X. **HYMENOPTERA**.—Wings four, membranous, with few nervures; sometimes absent. Mouth always provided with biting-jaws, or mandibles; the maxillæ and labium often converted into a suctorial organ. The metamorphosis is complete, but the various parts of the pupa are visible through the delicate enclosing membrane.

The *Hymenoptera* form a very extensive order, comprising the bees, wasps, ants, ichneumons, saw-flies, etc.

ORDER XI. **STREPSIPTERA**.—Females without wings or feet; parasitic. Males possessing the posterior pair of wings, which are large, membranous, and folded longitudinally like a fan. The anterior pair of wings rudimentary; jaws abortive.

The Strepsiptera are a limited order of parasitic insects of small size, found on bees and other Hymenoptera, generally between the segments of the abdomen.

ORDER XII. **COLEOPTERA**.—Mouth masticatory, furnished with an upper lip or labrum, two mandibles, two maxillæ, with maxillary palpi (generally four-jointed), and a moveable lower lip or labium, with jointed labial palpi. The four wings are usually present, and the anterior pair are not adapted for flight, but are hardened by chitine, so as to form protective cases (elytra) for the posterior wings. The inner margins of the elytra are generally straight, and when in contact they form a longitudinal suture. The posterior wings are membranous, and when not in use are folded beneath the elytra. The antennæ variable.

This order comprises all the beetles properly so called.

With insects, the principal parts attached to the head are two antennæ, an upper lip (labrum), a lower lip (labium), bearing the labial palpi; a pair of jaws (mandibles), an inner pair of jaws (maxillæ), to which are attached the maxillary palpi. The thorax is divided into three segments, the pro-thorax, meso-thorax, and meta-thorax. The

pro-thorax bears the front pair of legs; the meso-thorax bears the front pair of wings and second pair of legs; the meta-thorax bears the second pair of wings and the third pair of legs. The legs consist of the following principal parts: the coxa, trochanter, the femur, tibia, and tarsus.

The diversified elevations of the countries of the East Indies, with their varied temperatures, cause in localities a greater or less abundance of particular forms; but numerous genera of tropical and temperate climates are everywhere associated together, and the range which the genera enjoy is very considerable.

But the pervading character of Indian entomology is uniformity. We meet with numerous genera, both of tropical and temperate climes, associated together. There is a great intermingling of forms, and the range which genera enjoy is considerable. In part of the Himalayas, at the extreme southern points of India, in the west, and even in the Archipelago, there is one pervading character, evincing everywhere the prevalence of tropical genera. In Nepal and the southernmost extremity of the Mysore, in Ceylon, at Bombay, at Madras, and at Calcutta, also at Singapore, in Japan, and in Java, with the rest of the Polynesian Isles, the majority of the same types abound; and what is of more consequence, a great majority of the same species also occur in most of the above-mentioned regions. Also, if we turn to Africa, we find a considerable similarity in its entomology with that of Asia. Among the Carabidæ occur *Anthia*, *Orthogonius*, *Trigonodactyla*, and *Siagona*; among the *Lamellicornes*, *Epirinus*, and *Popillia*, the conical *Buprestidæ* and the extraordinary *Paussidæ*; and to these may be added the genera *Melyris*, *Megnolopus*, *Sagra*, and *Adorium*; *Dorylus* among the Hymenoptera, and *Diopis* among the Diptera. We find precisely the same species in both continents. Among the most conspicuous are *Copris sabæus* and *C. pithecius*, *Cetonia cornuta* and *Lytta gigas*. Even supposing that no identical species occurred common to Asia and Africa, a very remarkable similarity exists in the representatives of each; one example of which is *Ateuchus sanctus*, which very closely resembles the celebrated sacred beetle of the Egyptians, the object of their worship, by some regarded as an emblem of fertility, but more probably that of eternity.

This branch of natural history has been largely cultivated by many eminent writers, both in its scientific and economic relations; and among those who are quoted in this article may be named J. C. Fabricius, 1775 and 1803; Donovan; J. O. Westwood, Drury, *Exotic Entomology*; J. C. Farmer, F. W. Hope, 1837 and 1851; Thomas Horsfield and Frederic Moore; Sir James Emerson Tennent, A. R. Wallace, John Nietner, J. Wood-Mason, Charles Darwin, Sir John Lubbock, Albert Müller, W. H. Benson, R. Thompson, and Miss Eleanor A. Ormerod. John Curtis, in 1824 and 1860, wrote on *Farm Insects* and the Turnip Crop; and in 1877, and again in 1882, Miss Ormerod produced a very valuable work on the *Insects attacking Field and Garden Crops*.

The principal authors who have written on the insects of Eastern and Southern Asia, are Horsfield, F. Moore, Drury, Nietner, Wallace, Westwood, Wood-Mason.

Himalayan entomology in character is both

Asiatic and European, and the intermingling of forms of temperate and tropical climes is one of its most distinguishing peculiarities. In its valleys southern forms predominate over northern; and to the uninterrupted belts of jungle stretching along the mountain ranges, we may trace several tropical phytivorous genera far beyond their apparent natural limits. Some carnivorous insects are also found ranging far to the north in the Himalayas, an example of which is *Anthia 6-guttata*, a well-known native of the tropics; the specimens, however, are mere dwarfs compared with those of Peninsular India. Among the *Cicindelidæ*, *Colliuris* appears; among the *Carabidæ*, we find *Desera*, *Omphra*, and *Cyclosomus*; among the *Lamellicornes*, *Euchlora*, *Mimela*, and *Dicranoccephalus*; and to these may be added *Anisotelus* belonging to *Telephoridæ*, and *Podontia* and *Phyllocharis* to the *Chrysomelidæ*; all of these are attached to warm countries, and some, indeed, are seldom found but within the torrid zone. Many genera from the Himalayas evince an affinity to European types; various Himalayan genera closely approximate Siberian forms; and some of the species described by Dr. Gebler from the Altaic chain of mountains, particularly some *Chrysomelidæ*, are believed to be indigenous in both regions. Some few, however, are worth noticing, such as *Broscus* and true *Carabus*, *Gootrupes* and *Pimelia*. Several species of the following genera of *Coleoptera* occur in the Himalayas, as well as in Europe, namely, *Elatér*, *Melolontha*, *Chrysomela*, *Cassida*, and *Coccinella*. Among the carnivorous insects, *Dermestes lardarius* and *vulpinus*, *Corynetes violaceus* and *rufipes*, and some of the *Staphilinidæ*, are essentially the same in Europe and the Himalayas. Of *Lepidoptera*, *Papilio machaon* is evidently the same as that met with in England; the same remark will apply to *Vanessa Atalanta* and *Cynthia cardui*.

A greater number of species of *Lepidoptera* are disseminated throughout the world than of any other order. In Asia and Europe, we meet with *Papilio machaon*, *Gonepteryx rhamni*; with some species of *Colias* and *Pontia*, with *Vanessa Atalanta* and *Cynthia cardui*; and to these may be added several identical *Sphingidæ*, particularly *Acherontia Atropos*, *Deilephila*, and *Celerio*. Among the *Noctuidæ*, *Geometridæ*, *Tortricidæ*, and *Tineidæ*, many species will also be found inhabitants of both continents. In the *Orthoptera*, some *Gryllidæ* are common to countries remotely situated, which may partly be accounted for by their migratory habits. Among the *Blattidæ*, several tropical species range widely; some of them have become naturalized even in a northern climate; and Indian, Brazilian, and New Holland species live in the houses of London. Among the eastern *Neuroptera* there occur various *Libellulinæ* and *Hemerobiidæ*, closely resembling English species.

Among the *Hymenoptera* may be noticed the universal rauger, *Evania appendigaster*, ever attendant on *Blatta*, some *Ichneumonidæ*, *Cra-bronidæ*, *Apidæ*, and *Vespidæ*,—all of them presenting identical species with those of Britain.

In referring to the *Diptera* may be mentioned the orange-fly, the same in England, India, and America; the gnats and mosquitoes, common to the four quarters of the globe, alike the pest

of the Indian and Laplander; and, lastly, various species of musca. Passing by the Aptera, and the various parasites of birds, quadrupeds, and of man himself, we find among the Hemiptera several identical species of *Pentatoma*, *Reduvius*, *Tetyra*, besides *Cimex lectularius*, the scourge of all countries and climates.

Chinese insects were described by Fabricius and Dunovan. Mr. Hope, in March 1842, published half a century of the Coleoptera of Canton and Chusan, collected by Dr. Cantor. Part of Mr. Bowring's Coleoptera and Homoptera of Hong-Kong and neighbourhood, were published in the *Annals of Natural History*, 1844, by Mr. Adam White.

The following list, although necessarily incomplete, will give an idea of the families and genera occurring in Southern India. It is based on Sir J. E. Tennent's list of Ceylon insects:—

ORDER COLEOPTERA, Linn.

Fam. Cicindelidæ, Steph.
Cicindela, Linn.
Therates, Latr.
Collyris, Fabr.
Tricorypha, Latr.
Fam. Carabidæ, Leach.
Omophron, Latr.
Calasoma, Weber.
Pselaphonax, Wlk.
Casnomia, Latr.
Ophionea, Klug.
Eoplynes, Niet.
Heteroglossa, Niet.
Zuphium, Latr.
Pheropsophus, Solier.
Cymindis, Latr.
Anchista, Niet.
Dromius, Bon.
Lebia, Latr.
Creagra, Niet.
Elliotia, Niet.
Catasopus, Kirby.
Scarites, Fabr.
Clivina, Latr.
Leistus, Fœhl.
Isotarus, Lufert.
Panagæus, Latr.
Chlenus, Bon.
Anchomenus, Bon.
Agonum, Bon.
Colpodes, MacL.
Argutor, Meg.
Simphysus, Niet.
Bradytus, Steph.
Curtonotus, Steph.
Harpalus, Latr.
Calodromus, Niet.
Megaristerus, Niet.
Platysma, Bon.
Morio, Latr.
Barysomus, Dej.
Oodes, Bon.
Selonophorus, Dej.
Orthogonius, Dej.
Maraga, Wlk.
Helluodes, Westw.
Physocrotaphus, Parry.
Physodera, Esch.
Omphra, Latr.
Planetes, MacL.
Cardiaderus, Dej.
Distrigus, Dej.
Drumostoma, Dej.
Cyclocomus, Latr.
Cochleophilus, Niet.
Spathinus, Niet.
Aoupalus, Latr.
Bembidium, Latr.
Trochus, Clairv.

Fam. Dyticidæ, MacL.
Cybiaster, Curt.
Dytiscus, Linn.
Eunectes, Erich.
Hydaticus, Leach.
Colymbetes, Clairv.
Hydroporus, Clairv.
Fam. Gyrinidæ, Leach.
Dineutus, MacL.
Porrorynchus, Lap.
Gyretes, Brulle.
Gyrinus, Linn.
Orectochilus, Esch.
Fam. Staphilinidæ, Leach.
Ocypus, Kirby.
Philonthus, Leach.
Xantholinus, Dahl.
Sunius, Leach.
Edichirus, Erich.
Poderus, Fabr.
Stenus, Latr.
Osoirus, Leach.
Prognatha, Latr.
Leptochirus, Ferty.
Oxytelus, Grav.
Trogophloeus, Mann.
Omalium, Grav.
Aleochara, Grav.
Dinarda, Leach.
Fam. Pausidæ, Westw.
Cerapterus, Swed.
Pleuropterus, Westw.
Pausus, Linn.
Fam. Pselaphidæ, Leach.
Bryaxis.
Fam. Scydmenidæ, Leach.
Krineus, Wlk.
Scydmenus, Latr.
Fam. Trichopterigidæ.
Trichopteryx, Kirby.
Ptilium, Schupp.
Ptenidium, Erich.
Fam. Phalacridæ, Leach.
Phalaerus, Payk.
Fam. Nitidulidæ, Leach.
Nitidula, Fabr.
Nitidulopsis, Wlk.
Meligethes, Kirby.
Rhizophagus, Herbst.
Fam. Colydiadæ, Woll.
Lyctus, Fabr.
Ditoma, Illig.
Dastarus, Wlk.
Fam. Trogositidæ, Kirby.
Trogosita, Olive.
Fam. Cucujidæ, Steph.
Læomophilus, Dej.
Cucujus, Fabr.
Silvanus, Latr.
Brontes, Fabr.
Fam. Lathridiæ, Woll.

Lathridius, Herbst.
Corticaria, Marsh.
Monotoma, Herbst.
Fam. Dermestidæ, Leach.
Dermestes, Linn.
Attagenus, Latr.
Trinodes, Meg.
Fam. Histeridæ, Leach.
Hister, Linn.
Saprinus, Erich.
Platysoma, Leach.
Dendrophilus, Leach.
Fam. Aphodiadæ, MacL.
Aphodius, Illig.
Psammophilus, Gyll.
Fam. Trogidæ, MacL.
Trox, Fabr.
Fam. Copridæ, Leach.
Ateuchus, Weber.
Gymnopleurus, Illig.
Sisyphus, Latr.
Drepanocerus, Kirby.
Copris, Geoff.
Onthophagus, Latr.
Onitis, Fabr.
Fam. Dynastidæ, MacL.
Oryctes, Illig.
Xylotrupes, Hope.
Phileurus, Latr.
Fam. Geotrupidæ, Leach.
Bolbocera, Kirby.
Geotrupes, Latr.
Orphnus, MacL.
Silphodes, Westw.
Fam. Melolonthidæ, MacL.
Melolontha, Fabr.
Rhizotrogus, Latr.
Serica, MacL.
Plectria, Lep.
Isonychus, Mann.
Omalopia, Meg.
Apogonia, Kirby.
Phytalus, Erich.
Ancylonycha, Dej.
Leucophilus, Dej.
Fam. Rutelidæ.
Anomala, Meg.
Mimela, Kirby.
Parastasia, Westw.
Euchlora, MacL.
Phyllopertha, Kirby.
Popillia, Leach.
Adoretus.
Singhala, Blanch.
Fam. Cetoniadæ, Kirby.
Glycyphana, Burm.
Clinteria, Burm.
Toniocera, Burm.
Protetia, Burm.
Agestrata, Erich.
Coryphocera, Burm.
Macronota, Hoffm.
Fam. Trichiadæ, Leach.
Valgus, Scriba.
Fam. Lucanidæ, Leach.
Lucanus.
Odontolabis, Burm.
Dorcus.
Ægus, MacL.
Fam. Passalidæ, MacL.
Passalus, Fabr.
Fam. Sphæridiadæ, Leach.
Sphæridium, Fabr.
Cercyon, Leach.
Fam. Hydrophilidæ, Leach.
Hydrous, Leach.
Hydrobius, Leach.
Philydrus, Solier.
Berosus, Leach.
Hydrochus, Germ.
Georyssus, Latr.
Fam. Buprestidæ, Steph.
Sternocera, Esch.
Chrysobothris, Solier.
Chrysodema, Lap.

Bellionota, Esch.
Chrysobothris, Esch.
Agrius, Meg.
Fam. Elateridæ, Leach.
Lacon, Lap.
Camposternus, Latr.
Agrypnus, Esch.
Alaus, Esch.
Cardiophorus, Esch.
Corymbites, Latr.
Athous, Esch.
Ampedus, Meg.
Legna, Wlk.
Fam. Lampyridæ, Leach.
Lycus, Fabr.
Dictyopterus, Latr.
Lampyrus, Geoff.
Colophotia, Dej.
Harmatelia, Wlk.
Fam. Telephoridæ, Leach.
Telephorus, Schaff.
Eugeusis, Westw.
Fam. Cebriidæ, Steph.
Callirhipis, Latr.
Fam. Melyridæ, Leach.
Malachius, Fabr.
Malthinus, Latr.
Enicopus, Steph.
Honosca, Wlk.
Fam. Cleridæ, Kirby.
Cylidrus, Lap.
Stigmatium, Gray.
Necrobia, Latr.
Fam. Ptinidæ, Leach.
Ptinus, Linn.
Atractocerus, Pal.
Fam. Diaperidæ, Leach.
Diaperis, Geoff.
Fam. Tenebrionidæ, Leach.
Zophobas, Dej.
Pseudoblaps, Guer.
Tenebrio, Linn.
Trachyscelis, Latr.
Fam. Opatridæ, Shuck.
Opatrum, Fabr.
Asida, Latr.
Crypticus, Latr.
Phaleria, Latr.
Toxicum, Latr.
Roletophagus, Illig.
Uloma, Meg.
Alphitophagus, Steph.
Fam. Helopidæ, Steph.
Ondara, Wlk.
Cholipus, Dej.
Helops, Fabr.
Camaria, Lep.
Amarginus, Dalm.
Fam. Meloidæ, Woll.
Epicauta, Dej.
Cissites, Latr.
Mylabris, Fabr.
Fam. Cistelidæ, Steph.
Cistela, Fabr.
Allecula, Fabr.
Sora, Wlk.
Thaconnia, Wlk.
Fam. Mordellidæ, Steph.
Acosmus, Dej.
Rhipiphorus, Fabr.
Mordella, Linn.
Myrmecolax, Westw.
Fam. Anthicidæ, Wlk.
Anthicus, Bayk.
Fam. Cisnæidæ, Leach.
Ola, Latr.
Fam. Tomicidæ, Shuck.
Apate, Fabr.
Bostrichus, Geoff.
Platypus, Herbst.
Hylurgus, Latr.
Hylesinus.
Fam. Curculionidæ, Leach.
Bruchus, Linn.
Spermophagus, Steven.

Dendropemon, *Schon.*
 Dendrotrogus, *Jek.*
 Eucorynus, *Schon.*
 Basitropis, *Jek.*
 Litocerus, *Schon.*
 Tropideres, *Schon.*
 Cedus, *Waterh.*
 Xylinales, *Latr.*
 Xenocerus, *Germ.*
 Callistocerus, *Dohrn.*
 Anthribus, *Geoff.*
 Arceocerus, *Schon.*
 Dipieza, *Pasc.*
 Apolecta, *Pasc.*
 Arrhenodes, *Steven.*
 Cerobates, *Schon.*
 Ceocephalus, *Schon.*
 Nemocephalus, *Latr.*
 Apoderus, *Oliv.*
 Rhynchites, *Herbst.*
 Apion, *Herbst.*
 Strophosomus, *Bilbug.*
 Piazomias, *Schon.*
 Astycus, *Schon.*
 Cleonus, *Schon.*
 Myllocerus, *Schon.*
 Phyllobius, *Schon.*
 Episomus, *Schon.*
 Lixus, *Fabr.*
 Aolces, *Schon.*
 Alcides, *Dalm.*
 Acinomis, *Fairm.*
 Apotomorphinus, *Schon.*
 Cryptorhynchus, *Illig.*
 Camptorhinus, *Schon.*
 Desmidophorus, *Chevr.*
 Sipalus, *Schon.*
 Mecopus, *Dalm.*
 Rhynchophorus, *Herbst.*
 Protocerus, *Schon.*
 Sphancophorus, *Schon.*
 Cossanus, *Clairv.*
 Scitophilus, *Schon.*
 Mecinus, *Germ.*
Fam. Prionidae, Leach.
 Trictonotoma, *Gray.*
 Prionomma, *White.*
 Acanthophorus, *Serv.*
 Cnemoplites, *Newm.*
 Egoosma, *Serv.*
Fam. Cerambycidae, Kirby.
 Cerambyx, *Linn.*
 Sebasmia, *Pasc.*
 Callichroma, *Latr.*
 Homalomesa, *White.*
 Colobus, *Serv.*
 Thranus, *Pasc.*
 Deuteromma, *Pasc.*
 Obrium, *Meg.*
 Psilomerus, *Blanch.*
 Olytus, *Fabr.*
 Rhaphuma, *Pasc.*
 Ceresium, *Newm.*
 Stromatium, *Serv.*
 Hesperophanes, *Muls.*
Fam. Lamiidae, Kirby.
 Nyphona, *Muls.*
 Mesosa, *Serv.*
 Coptops, *Serv.*
 Xylorhiza, *Dej.*
 Cacia, *Newm.*
 Batocera, *Blanch.*
 Monohammus, *Meg.*
 Ceroopsius, *Dup.*
 Palargoderus, *Serv.*
 Olenocampus, *Chevr.*
 Praonetha, *Dej.*
 Apomecyna, *Serv.*
 Ropica, *Pasc.*
 Hathiia, *Serv.*
 Ioles, *Pasc.*
 Glenea, *Newm.*
 Stibar, *Hope.*
Fam. Hispidae, Kirby.
 Oncocephala, *Dohrn.*

Leptispa, *Baly.*
 Amphisa, *Baly.*
 Dohrnia, *Baly.*
 Estigmone, *Hope.*
 Hipsa, *Linn.*
 Platypria, *Guer.*
Fam. Cassididae, Westw.
 Epistictia, *Boh.*
 Hoplionota, *Hope.*
 Aspidomorpha, *Hope.*
 Cassida, *Linn.*
 Laccoptera, *Boh.*
 Coptocycla, *Chevr.*
Fam. Sagridae, Kirby.
 Sagra, *Fabr.*
Fam. Donacidae, Lacord.
 Donacia, *Fabr.*
 Coptocephala, *Chevr.*
Fam. Eumolpidae, Baly.
 Corynodes, *Hope.*
 Glyptoscelis, *Chevr.*
 Eumolpus, *Fabr.*
Fam. Cryptocophalidae, Kirby.
 Inclica, *Wlk.*
 Cryptocophalus, *Geoff.*
 Diapromorpha, *Lac.*
Fam. Chrysomelidae, Leach.
 Chalcolanpra, *Baly.*
 Lina, *Meg.*
 Chrysomola, *Linn.*
Fam. Galerucidae, Steph.
 Galeruca, *Geoff.*
Fam. Haliidae.
 Graptodera, *Chevr.*
 Monolepta, *Chevr.*
 Thymis, *Steph.*
Fam. Coccinellidae, Latr.
 Coccinella, *Linn.*
 Neda, *Muls.*
 Coelophora, *Muls.*
 Chilocorus, *Leach.*
 Epilachna, *Chevr.*
 Scymnus, *Kug.*
Fam. Erotylidae, Leach.
 Fatua, *Dej.*
 Daene.
 Triplax, *Payk.*
 Tritoma, *Fabr.*
 Iachyrus, *Chevr.*
Fam. Endomychidae, Leach.
 Eugonius, *Gerst.*
 Eumorphus, *Weber.*
 Stenotarsus, *Perty.*
 Lycoepidina, *Latr.*
 Ancylopus, *Gerst.*
 Saula, *Gerst.*
 Mycetina, *Gerst.*

ORDER ORTHOPTERA, Linn.

Fam. Forficulidae, Steph.
 Forficula, *Linn.*
Fam. Blattidae, Steph.
 Panesthia, *Serv.*
 Polyzosteria, *Burm.*
 Corydia, *Serv.*
Fam. Mantidae, Leach.
 Empusa, *Illig.*
 Harpax, *Serv.*
 Schizoccephala, *Serv.*
 Mantia, *Linn.*
Fam. Phasmidae, Serv.
 Acrophylla, *Gray.*
 Phasma, *Licht.*
 Phyllium, *Illig.*
Fam. Gryllidae, Steph.
 Acheta, *Linn.*
 Phylodactylus, *Brull.*
 Steirodon, *Serv.*
 Phyllophora, *Thunb.*
 Acanthodia, *Serv.*
 Phaneroptera, *Serv.*
 Phymatoc, *Thunb.*

Truxalis, *Linn.*
 Acridium, *Geoff.*

ORDER NEUROPTERA, Linn.

Fam. Sericoctomidae, St.
 Mormopia, *Curt.*
Fam. Leptoceridae, Leach.
 Macroneura, *Pict.*
 Molanna, *Curt.*
 Setodes, *Ramb.*
Fam. Psychomidae, Curt.
 Chimarra, *Leach.*
Fam. Hydropsychidae, Curt.
 Hydropsyche, *Pict.*
Fam. Rhyacophilidae, St.
 Rhyacophila, *Pict.*
Fam. Perlidae, Leach.
 Perla, *Geoff.*
Fam. Siliidae, Westw.
 Dilar, *Ramb.*
Fam. Hemerobidae, Leach.
 Mantissa, *Illig.*
 Chrysopa, *Leach.*
 Micromerus, *Ramb.*
 Hemerobius, *Linn.*
 Coniopteryx, *Hal.*
Fam. Myrmeleionidae, Leach.
 Palparea, *Ramb.*
 Acanthoclisia, *Ramb.*
 Myrmelcon, *Linn.*
 Ascalaphus, *Fabr.*
Fam. Paocidae, Leach.
 Paocus, *Latr.*
Fam. Termitidae, Leach.
 Termes, *Linn.*
Fam. Embidae, Hagen.
 Oligotoma, *Westw.*
Fam. Ephemeridae, Leach.
 Baetis, *Leach.*
 Potamanthus, *Pict.*
 Cloe, *Burm.*
 Cenis, *Steph.*
Fam. Libellulidae.
 Oalopteryx, *Leach.*
 Euphna, *Sclys.*
 Micromerus, *Ramb.*
 Trichocnema, *Sclys.*
 Lestes, *Leach.*
 Agrion, *Fabr.*
 Gynacantha, *Ramb.*
 Epophthalmia, *Burm.*
 Zyxomma, *Ramb.*
 Acisoma, *Ramb.*
 Libellula, *Linn.*

ORDER HYMENOPTERA, Linn.

Fam. Formicidae, Leach.
 Formica, *Linn.*
 Polytrachis, *Smith.*
Fam. Poneridae, Smith.
 Odontomachus, *Latr.*
 Typhlopone, *Westw.*
 Myrmica, *Latr.*
 Crematogaster, *Land.*
 Pseudomyrma, *Guen.*
 Atta, *St. Farg.*
 Pheidole, *Westw.*
 Meranoplus, *Smith.*
 Cataulacus, *Smith.*
Fam. Mutillidae, Leach.
 Mutilla, *Linn.*
 Tiphia, *Fabr.*
Fam. Eumenidae, Westw.
 Odynerus, *Latr.*
 Scolia, *Fabr.*
Fam. Crabronidae, Leach.
 Philanthus, *Fabr.*
 Stigmus, *Jur.*
Fam. Sphegidae, Steph.
 Ammophila, *Kirby.*
 Pelopsus, *Latr.*
 Spheg, *Fabr.*
 Ampulex, *Jur.*

Fam. Larridae, Steph.
 Larrada, *Smith.*
Fam. Pompilidae, Leach.
 Pompilus, *Fabr.*
Fam. Apidae, Leach.
 Andrena, *Fabr.*
 Nomia, *Latr.*
 Allodaps, *Smith.*
 Ceratina, *Latr.*
 Colioxys, *Latr.*
 Crocisa, *Jur.*
 Stelis, *Panz.*
 Anthophora, *Latr.*
 Xylcopa, *Latr.*
 Apis, *Linn.*
 Trigona, *Jur.*
Fam. Chrysidae, Wlk.
 Stilbum, *Spin.*
Fam. Dorylidae, Shuck.
 Enictus, *Shuck.*
Fam. Ichneumonidae, Leach.
 Cryptus, *Fabr.*
 Hemiteles, *Grav.*
 Porizon, *Fall.*
 Pimpla, *Fabr.*
Fam. Braconidae, Hal.
 Microgaster, *Latr.*
 Spathius, *Nees.*
 Heratemis, *Wlk.*
 Nebartha, *Wlk.*
 Psytalia, *Wlk.*
Fam. Chalcididae, Spin.
 Chalcis, *Fabr.*
 Halticella, *Spin.*
 Dirrhinus, *Dalm.*
 Eurytoma, *Illig.*
 Eucharis, *Latr.*
 Pteromalus, *Swed.*
 Encyrtus, *Latr.*
Fam. Diapriidae, Hal.
 Diapria, *Latr.*

ORDER THYSANODA, Dum.

Thrips, *Linn.*

ORDER LEPIDOPTERA, Linn.

Fam. Papilionidae, Leach.
 Ornithoptera, *Boisd.*
 Papilio, *Linn.*
 Pontia, *Fabr.*
 Pieris, *Schr.*
 Callosunc, *Doubl.*
 Idmais, *Boisd.*
 Thestias, *Boisd.*
 Hebonia, *Hubn.*
 Kronia, *Hubn.*
 Callidryas, *Boisd.*
 Terias, *Swain.*
Fam. Nymphalidae, Swain.
 Euplaea, *Fabr.*
 Danaia, *Latr.*
 Hestia, *Hubn.*
 Telchinia, *Hubn.*
 Oethosia, *Fabr.*
 Messarus, *Doubl.*
 Atella, *Doubl.*
 Argynnis, *Fabr.*
 Ergolis, *Boisd.*
 Vanessa, *Fabr.*
 Libythea, *Fabr.*
 Pyrausta, *Hubn.*
 Junonia, *Hubn.*
 Precis, *Hubn.*
 Cynthia, *Fabr.*
 Parthenos, *Hubn.*
 Limenitis, *Fabr.*
 Neptis.
 Diadema, *Boisd.*
 Symphedra, *Hubn.*
 Adolias, *Boisd.*
 Nymphalis, *Latr.*
 Ypthima, *Hubn.*
 Cyilo, *Boisd.*

- Mycalasis, Hubn.*
Cænonympha, Hubn.
Emesia, Fabr.
Fam. Lycenidæ, Leach.
Anopa, Boisd.
Loxura, Horaf.
Myrina, Godt.
Amblypodia, Horaf.
Aphneus, Hubn.
Dipsas, Doubl.
Lycæna, Fabr.
Polyommatus, Latr.
Lucia, Westw.
Pithecops, Horaf.
Fam. Hesperidæ, Steph.
Goniloba, Westw.
Pyrpus, Hubn.
Nisoniades, Hubn.
Pamphila, Fabr.
Achylodes, Hubn.
Hesperia, Fabr.
Fam. Sphingidæ, Leach.
Sesia, Fabr.
Macroglossa, Ochs.
Calymania, Boisd.
Chærocampa, Dup.
Pergesa, Wlk.
Panacra, Wlk.
Daphnis, Hubn.
Zonilia, Boisd.
Macrosila, Boisd.
Sphinx, Linn.
Achorontia, Ochs.
Smerinthus, Latr.
Fam. Castniidæ, Wlk.
Eugenia, Dalm.
Agoceri, Latr.
Fam. Zygenidæ, Leach.
Syntomis, Ochs.
Glaucopsis, Fabr.
Eachromia, Hubn.
Fam. Lithosiidæ, Steph.
Scaptosyle, Wlk.
Nyctemera, Hubn.
Euschema, Hubn.
Chalcusia, Hubn.
Eterusia, Hope.
Trypanophora, Koll.
Heteropan, Wlk.
Hypsa, Hubn.
Vitessa, Moor.
Lithosia, Fabr.
Setina, Schr.
Doliche, Wlk.
Pitane, Wlk.
Emene, Wlk.
Dirade, Wlk.
Cyllene, Wlk.
Bizone, Wlk.
Deiopeia, Steph.
Fam. Alope, Wlk.
Tinotius, Wlk.
Cretonotos, Hubn.
Acomnia, Wlk.
Spilosoma, Steph.
Cyenia, Hubn.
Anthous, Wlk.
Aloa, Wlk.
Amerila, Wlk.
Ammatho, Wlk.
Fam. Liparidæ, Wlk.
Artaxa, Wlk.
Acyphas, Wlk.
Laocia, Wlk.
Amsacta, Wlk.
Antipha, Wlk.
Anaxila, Wlk.
Proodeca, Wlk.
Redoa, Wlk.
Euproctia, Hubn.
Cispia, Wlk.
Dasychira, Hubn.
Lymantria, Hubn.
Enome, Wlk.
Dreata, Wlk.
- Pandala, Wlk.*
Charnidas, Wlk.
Fam. Psychidæ, Brw.
Psycho.
Metisa, Wlk.
Eumeta, Wlk.
Cryptothela, Templ.
Fam. Notodontidæ, St.
Cerura, Schr.
Sauropus, Germ.
Nioda, Wlk.
Rilia, Wlk.
Ptilomacra, Wlk.
Elavia, Wlk.
Notodonta, Ochs.
Ichthyura, Hubn.
Fam. Limacodidæ, Dup.
Scopelodes, Westw.
Messata, Wlk.
Miresa, Wlk.
Nyssia, Schr.
Necra, Schr.
Narosa, Wlk.
Naprepa, Wlk.
Fam. Drepanulidæ, Wlk.
Oreta, Wlk.
Arna, Wlk.
Ganisa, Wlk.
Fam. Saurinidæ, Wlk.
Attacus, Linn.
Antheraea, Hubn.
Tropæa, Hubn.
Fam. Bombycidæ, Steph.
Trabala, Wlk.
Lasiocampa, Schr.
Megasoma, Boisd.
Lebeda, Wlk.
Fam. Cosmidæ, Newm.
Cossus, Fabr.
Zeuzera, Latr.
Fam. Hespilidæ, Steph.
Phassus, Steph.
Fam. Cymatophoridæ, Schr.
Thyatira, Ochs.
Fam. Bryophilidæ, Guen.
Bryophila, Treit.
Fam. Bombycoidæ, Guen.
Diptera, Ochs.
Fam. Leucanidæ, Guen.
Leucania, Ochs.
Bracta, Wlk.
Crambopsis, Wlk.
Fam. Glottulidæ, Guen.
Polytela, Guen.
Glottula, Guen.
Chasmina, Wlk.
Fam. Apamidæ, Guen.
Laphygma, Guen.
Prodenia, Guen.
Calo-gramma, Wlk.
Heliophobus, Boisd.
Hydræcia, Guen.
Apamea, Ochs.
Celæna, Steph.
Fam. Caradrinidæ, Guen.
Amyna, Guen.
Fam. Noctuidæ, Guen.
Agrotis, Ochs.
Fam. Hadenidæ, Guen.
Euroia, Hubn.
Epiceia, Wlk.
Hadena, Treit.
Ansa, Wlk.
Fam. Xylinidæ, Guen.
Ragada, Wlk.
Crysaæa, Wlk.
Egelista, Wlk.
Xylina, Ochs.
Fam. Heliothidæ, Guen.
Heliothis, Ochs.
Fam. Hæmerosidæ, Guen.
Ariola, Wlk.
Fam. Acontidæ, Guen.
Xanthodes, Guen.
- Acontia, Ochs.*
Chlumetia, Wlk.
Fam. Anthophilidæ, Guen.
Micra, Guen.
Fam. Eriopidæ, Guen.
Callopietria, Hubn.
Fam. Eurhipidæ, Guen.
Penicillarin, Guen.
Rhessala, Wlk.
Eutelia, Hubn.
Fam. Plusiidæ, Boisd.
Abrostola, Ochs.
Plusia, Ochs.
Fam. Calpidæ, Guen.
Calpe, Treit.
Oreasia, Guen.
Deva, Wlk.
Fam. Hemiceridæ, Guen.
Westermannia, Hubn.
Fam. Hyblæidæ, Guen.
Hyblea, Guen.
Nolasena, Wlk.
Fam. Gonopteridæ, Guen.
Cosmophila, Boisd.
Anomis, Hubn.
Gonitis, Guen.
Eporedia, Wlk.
Rusicada, Wlk.
Paspida, Wlk.
Fam. Toxocampidæ, Guen.
Toxocampa, Guen.
Albonica, Wlk.
Fam. Polydesmidæ, Guen.
Polydesma, Boisd.
Fam. Homopteridæ, Boisd.
Alamis, Guen.
Homoptera, Boisd.
Diacuista, Wlk.
Daxata, Wlk.
Fam. Hypogrammidæ, Guen.
Briarda, Wlk.
Brana, Wlk.
Corsa, Wlk.
Avatha, Wlk.
Gadirtha, Wlk.
Ercheia, Wlk.
Plotheia, Wlk.
Diomea, Wlk.
Dinumma, Wlk.
Lusia, Wlk.
Abunis, Wlk.
Fam. Catephiidæ, Guen.
Cocytodes, Guen.
Catephia, Guen.
Steiria, Wlk.
Aucha, Wlk.
Egilia, Wlk.
Maceda, Wlk.
Fam. Hypocalidæ, Guen.
Hypocala, Guen.
Fam. Catocalidæ, Boisd.
Blonina, Wlk.
Fam. Ophideridæ, Guen.
Ophideres, Boisd.
Potamophora, Guen.
Lygniodes, Guen.
Fam. Erebidæ, Guen.
Oxyodes, Guen.
Fam. Ommatophoridæ, Guen.
Spiroidonia, Hubn.
Sericia, Guen.
Patula, Guen.
Argiva, Hubn.
Beregra, Wlk.
Fam. Hypopyridæ, Guen.
Spiramia, Guen.
Hypopyra, Guen.
Ortopana, Wlk.
Entomogramma, Guen.
Fam. Bendidæ, Guen.
Homæa, Guen.
Hulodes, Guen.
Fam. Ophiuridæ, Guen.
- Sphingomorpha, Guen.*
Lagoptera, Guen.
Ophiodes, Guen.
Oerbia, Wlk.
Ophiama, Guen.
Achæa, Hubn.
Serrodes, Guen.
Naxia, Guen.
Calesia, Guen.
Hypætra, Guen.
Ophiura, Ochs.
Fodina, Guen.
Grammodes, Guen.
Fam. Euclididæ, Guen.
Trigonodes, Guen.
Fam. Remigidæ, Guen.
Remigia, Guen.
Fam. Focillidæ, Guen.
Focilla, Guen.
Fam. Amphignidæ, Guen.
Lacera, Guen.
Amphigonia, Guen.
Fam. Thermisidæ, Guen.
Sympis, Guen.
Thermesia, Hubn.
Azania, Wlk.
Selenia, Guen.
Ephyroses, Guen.
Capnoides, Guen.
Ballatha, Wlk.
Daranissa, Wlk.
Darsa, Wlk.
Fam. Urapterigidæ, Guen.
Lagyr, Wlk.
Fam. Ennomidæ, Guen.
Hyperthyra, Guen.
Orsonoba, Wlk.
Pascellina, Wlk.
Lagina, Wlk.
Fam. Boarmidæ, Guen.
Amblychia, Guen.
Boarmia, Treit.
Hypochroma, Guen.
Gnophos, Treit.
Hemerophila, Steph.
Agathia, Guen.
Bulonga, Wlk.
Fam. Geometridæ, Guen.
Geometra, Linn.
Nemoria, Hubn.
Thalassodes, Guen.
Comibana, Wlk.
Celenna, Wlk.
Pseudoterpna, Wlk.
Amaurinia, Guen.
Fam. Palyadæ, Guen.
Eumeles, Dunc.
Fam. Ephyridæ, Guen.
Ephyra, Dup.
Fam. Acidalidæ, Guen.
Drapetodes, Guen.
Pomasia, Guen.
Acidalia, Treit.
Cabera, Steph.
Hyria, Steph.
Timandra, Dup.
Agyris, Guen.
Xanopteryx, Schr.
Fam. Micronidæ, Guen.
Micronia, Guen.
Fam. Macaridæ, Guen.
Macaria, Curt.
Doara, Wlk.
Fam. Larentidæ, Guen.
Sauria, Guen.
Campogramma, Steph.
Blemysia, Wlk.
Coremia, Guen.
Lobophora, Curt.
Mesogramma, Steph.
Eupithecia, Curt.
Gathynia, Wlk.
Fam. Platydæ, Guen.
Trigonia, Guen.
Fam. Hypenidæ, Schr.

Dichromia, Guen.
Hypena, Schr.
Gesonina, Wlk.
Fam. Herminidæ, Dup.
Herminia, Latr.
Adrapas, Wlk.
Bertula, Wlk.
Bocana, Wlk.
Orthaga, Wlk.
Hipoopa, Wlk.
Lamura, Wlk.
Echana, Wlk.
Dragana, Wlk.
Pingrasa, Wlk.
Egnasia, Wlk.
Berreesa, Wlk.
Imma, Wlk.
Ohusaria, Wlk.
Gorgatba, Wlk.
Catada, Wlk.
Fam. Pyralidæ, Guen.
Pyralis, Linn.
Aglossa, Latr.
Labanda, Wlk.
Fam. Eanyohidæ, Dup.
Pyrausta, Schr.
Fam. Asopidæ, Guen.
Desmia, Westw.
Ediodes, Guen.
Samea, Guen.
Asopia, Guen.
Agathodes, Guen.
Lencinades, Guen.
Hymenia, Hubn.
Agrotæra, Schr.
Isoteryx, Guen.
Fam. Hydrocampidæ, Guen.
Oligostigma, Guen.
Cataglyphis, Schr.
Fam. Spilomelidæ, Guen.
Lepyrodæ, Guen.
Phalangiodæ, Guen.
Spilomela, Guen.
Nistra, Wlk.
Pagya, Wlk.
Massepha, Wlk.
Fam. Margarodidæ, Guen.
Glyphodes, Guen.
Phakellura, L. Guild.
Margarodes, Guen.
Pygospila, Guen.
Neurina, Guen.
Ilurgia, Wlk.
Fam. Botydæ, Guen.
Botys, Latr.
Ebulea, Guen.
Pionea, Guen.
Scopula, Schr.
Godara, Wlk.
Herculia, Wlk.
Mocyna, Guen.
Fam. Scoparidæ, Guen.
Scoparia, Haw.
Davana, Wlk.
Darsania, Wlk.
Dosara, Wlk.
Fam. Choreutidæ, Staint.
Ninocaba, Wlk.
Simethia, Leach.
Fam. Phycidæ, Staint.
Myeloid, Hubn.
Dacusa, Wlk.
Daroma, Wlk.
Homocoma, Curt.
Nephopterix, Hubn.
Pempelia, Hubn.
Prionapterix, Steph.
Pindictora, Wlk.
Lacipea, Wlk.
Araxes, Steph.
Catagela, Wlk.
Fam. Crambidæ, Dup.
Crambus, Fabr.
Darbhæa, Wlk.
Jarthea, Wlk.

Bullina, Wlk.
Bembina, Wlk.
Chilo, Zinck.
Dariusæ, Wlk.
Arrhade, Wlk.
Darnensis, Wlk.
Fam. Chlophoridæ, Staint.
Thagora, Wlk.
Earias, Hubn.
Fam. Tortricidæ, Steph.
Lozotænia, Steph.
Peronea, Curt.
Lithogramma, Steph.
Dictyopteryx, Steph.
Homona, Wlk.
Hemonia, Wlk.
Achroia, Hubn.
Fam. Yponomeutidæ, Steph.
Atteva, Wlk.
Fam. Gelichidæ, Staint.
Depressaria, Haw.
Decuria, Wlk.
Gelechia, Hubn.
Gizama, Wlk.
Enisipia, Wlk.
Gapharia, Wlk.
Gocosa, Wlk.
Cimitra, Wlk.
Ficula, Wlk.
Frcsilia, Wlk.
Gesontha, Wlk.
Aginis, Wlk.
Cadra, Wlk.
Fam. Glyphpterigidæ, Staint.
Glyphteryx, Hubn.
Hybele, Wlk.
Fam. Tineidæ, Leach.
Tinea, Linn.
Fam. Lyonetidæ.
Cachura, Wlk.
Fam. Pterophoridæ.
Pterophorus, Geoff.
ORDER DIPTERA,
Linn.
Fam. Mycetophilidæ, Hal.
Sciara, Meig.
Fam. Cecidomyidæ, Hal.
Cecidomyia, Latr.
Fam. Simulidæ, Hal.
Simulium, Latr.
Fam. Chironomidæ, Hal.
Ceratopogon, Meig.
Fam. Culicidæ, Steph.
Culex, Linn.
Fam. Tipulidæ, Hal.
Ctenophora, Fabr.
Gymnoplusia, Westw.
Fam. Stratiomidæ, Latr.
Ptilocera, Wied.
Pachygaster, Meig.
Acanthina, Wied.
Fam. Tabanidæ, Leach.
Pangonia, Latr.
Fam. Asilidæ, Leach.
Trupanea, Macq.
Asilus, Linn.
Fam. Dolichopidæ, Leach.
Psilopus, Meig.
Fam. Muscidæ, Latr.
Tachina, Fabr.
Musca, Linn.
Dacus, Fabr.
Ortalis, Fall.
Sciomyza, Fall.
Drosophila, Fall.
Fam. Nycteribidæ, Leach.
Nycteribia, Latr.
ORDER HEMIPTERA,
Linn.
Fam. Pachycoridæ, Dall.
Cantuo, Bmyot and Serv.
Callidea, Lap.

Fam. Eurygastoridæ, Dall.
Trigonosoma, Lap.
Fam. Plataspidæ, Dall.
Coptosoma, Lap.
Fam. Halytidæ, Dall.
Halys, Fabr.
Fam. Pentatomidæ, St.
Pentatoma, Olive.
Catacanthus, Spin.
Rhaphigaster, Lap.
Fam. Edessidæ, Dall.
Aspongopus, Lap.
Tesseratoma, Lap. and Serv.
Cyclopelta, Am. and Serv.
Fam. Phyllocephalidæ, Dall.
Phyllocephala, Lap.
Fam. Mictidæ, Dall.
Mictis, Leach.
Crinocerus, Burm.
Fam. Aniroseolidæ, Dall.
Leptoscelis, Lap.
Serinotha, Spin.
Fam. Alydidæ, Dall.
Alydus, Fabr.
Fam. Stenocephalidæ, Dall.
Leptocoris, Latr.
Fam. Coreidæ, Steph.
Rhopalus, Schill.
Fam. Lygæidæ, Westw.
Lygæus, Fabr.
Rhyparochromus, Curt.
Fam. Aradidæ, Wlk.
Picstosoma, Lap.
Fam. Tingidæ, Wlk.
Calloniada, Wlk.
Fam. Cimicidæ, Wlk.
Cimex, Linn.
Fam. Reduviidæ, Steph.
Pirates, Burm.
Acanthaspis, Am. and Serv.
Fam. Hydrometridæ, Leach.
Ptilomera, Am. and Serv.

Fam. Nepidæ, Leach.
Belostoma, Latr.
Nepa, Linn.
Fam. Notonectidæ, Steph.
Notonecta, Linn.
Corixa, Geoff.
ORDER HOMOPTERA,
Latr.
Fam. Cicadidæ, Westw.
Dundubia, Am. and Serv.
Cicada, Linn.
Fam. Fulgoridæ, Schaum.
Hotinus, Am. and Serv.
Pyrops, Spin.
Aphana, Guer.
Elidiptera, Spin.
Fam. Cixiidæ, Wlk.
Eurybrachys, Guer.
Cixius, Latr.
Fam. Issidæ, Wlk.
Hemiphysaricus, Schaum.
Fam. Derbidæ, Schaum.
Thracia, Westw.
Dorbe, Fabr.
Fam. Platidæ, Schaum.
Platoides, Guer.
Ricania, Germ.
Pocloptera, Latr.
Fam. Mombacidæ, Wlk.
Oxyrhachis, Germ.
Centrotus, Fabr.
Fam. Cercopidæ, Leach.
Cersopsis, Fabr.
Ptyclus, Lap. and Serv.
Fam. Tettigoniidæ, Wlk.
Tettigonia, Latr.
Fam. Scariidæ, Wlk.
Ledra, Fabr.
Gypona, Germ.
Fam. Issidæ, Wlk.
Acocephalus, Germ.
Fam. Psyllidæ, Latr.
Psylla, Geoff.
Fam. Coccidæ, Leach.
Lecanium, Illig.
Coccus.

Some insects are useful to man and his industries, but some are hurtful, even ruinous; some are of wonderful beauty, and others are of interest from peculiarity of structure or of habits. They are gifted with such senses as love, touch, taste, smell, sight, hearing, and the commanding and governing senses, and in this state the two sexes meet and the propagation of their kind is effected. After impregnating, the males usually die. The females live a short space longer, until they lay their eggs. Their fecundity is generally very great, but their numbers are kept under by many insectivorous creatures,—amongst birds by woodpeckers, by the Sittinæ or nuthatches, by Certhins or true creepers, and by the Parrinæ or titmice. The hard-bodied beetles and other Coleoptera are eagerly seized while on the wing by the shrieks, drongas, crows, rollers, bee-eaters, thrushes, and others. Many bats, carnaria, and civots are insect feeders. The ants, the acari, and ichneumonidæ, among insects, destroy caterpillars and grubs, and some of the ichneumons destroy the larvæ of many species of gall-flies. Genera of the family Mordellidæ are mostly parasites of the Hymenoptera. They abound in tropical climates, and check the increase of the Vespidæ (wasps), and Bombidæ (bees). The lizards, the chameleons, and the geckos eat up great numbers of the Achetidæ (crickets), and the little chip-lak lizard of all India is unceasing in making them its prey.

Very few insects are edible, and from their small size they add little to the food supplies of man. The Greeks ate grasshoppers; even now the aborigines of New South Wales eat them raw, first taking off their wings. *Ælian* relates of an Indian king, who for a dessert, instead of fruit, set before his guests a roasted worm taken from a plant (probably the larva of an insect), which was thought very delicious. Mites in myriads are consumed in cheese. Negroes in Jamaica eat the Bugong butterflies, after removing the wings, and they store them up by pounding and smoking them.

The Chinese, it is said, thrifly eat the chrysalis of the silkworm, after making use of the silk; the larvæ of a hawk-moth are also relished.

The Palolo viridis or sea-worm, and the grub of the *Cordylia palmarum* or palm-weevil, are used as food articles. The grub of the palm-weevil is the size of a thumb, and is a favourite with some races of India. The palm-weevil of Burma, quite a large insect, is, according to Dr. Mason, a species of *Calandra*. Its larva is an odious-looking grub, which is eaten by the Burmese, and esteemed by them a great luxury.

The grub of a species of *Cicada* of the Homoptera is eaten by the Karens as a great luxury. It is domiciled in a clay tube several inches high, from which the Karens extract it by a thorny branch of a bamboo.

Humboldt mentions ants as being eaten by the *Marivitunos* and *Margueratares*, but he does not specify the genus or species. Hottentots and races in the East Indies eat the termites, or white ants, boiled, fried, and raw. Broughton, in his *Letters* written in a Mahratta camp in 1809, tells us that they were carefully sought after, and preserved for the use of the debilitated Lurjee Rao, prime minister of Sindia. They are delicate eating. The natives mix them with flour, and make a variety of pastry; or they parch them in pots over a gentle fire, with or without ghi, stirring them about as is done in roasting coffee. White ants, at their season of pairing, about the commencement of the rains, take wing, and pour into houses that are lighted up. They almost instantly cast their wings, and are then mere creeping insects, easily caught.

The peasants of Languedoc hold the *Mantis religiosa* almost sacred; they call it *Prega Deori* or *Prie Dieu*.

For man and his industries insects furnish many valuable materials. Galls are employed in dyeing and in tanning and ink-making, and are also used medicinally. They are produced on different species of oak, one of them by the female of the *Cynips* or *Diplolepis* piercing the buds of *Quercus* *infectoria*, and, it is said, also of *Q. ballota*; another gall, also, on the tamarisk, *Tamarix Indica*, is largely gathered on the N.W. borders of India, in Central Asia, and Kurdistan. In China, a gall, which is said to be produced by an aphid, is more bulky than the oak galls, and of very irregular shape, and hollow.

The cochineal insect, the *Coccus cacti*, is of great value in the arts. There are two species, one yielding the fine cochineal of commerce, the other the *Grana sylvestris* or wild cochineal. The latter is naturalized in India, but it is of little commercial value, being enveloped in a thick cottony down, which cannot be separated from

the insect for the preparation of the dye. The fine cochineal insect lives on several cultivated kinds of thornless *Opuntia*, and *O. cochinilifera*, which is employed in the W. Indies for rearing the insect, has been introduced into India. The fine insect will not settle on the wild prickly pear, *O. Dillenii*. The females alone yield the dye. The young are viviparous; every cochineal mother produces above a hundred young ones. Whilst within the mother they appear to be all connected, one after the other, by an umbilical cord to a common placenta, and in this order they are, in due time, brought forth as living animals, after breaking the membrane in which they were at first probably contained as eggs. The fine cochineal, the *Grana fina*, is brought to Europe chiefly from Central America, and sells in England at 3s. 6d. It yields a valuable red, crimson, scarlet dye for wool and silk, and colouring material. The best rouge is made from it, and its imports into Britain in 1881 were valued at £355,924.

Another species of *Coccus*, *C. maniparus* of Arabia, punctures the *Tamarix gallica*, and causes the exudation of the Arabian manna. But, in India, the most valuable of the species of *Coccus* is *C. lacca*, the female of which becomes the lac of commerce. It is a product of British India, and in the year 1877-78 the exports were,—

Shell-lac,	78,875 cwt.	Rs. 28,50,552
Button lac (1878-79), 17,114 "	"	5,46,061
Stick-lac,	1,933 "	15,807
Lac dye,	9,570 "	2,90,087
Other kinds,	14,807 "	4,64,035

This forest product varies in quantity from year to year.

The trees on which the female *Coccus lacca* chiefly settle are the *Ficus Indica*, *F. religiosa*, *Butea frondosa*, the cotton trees, *Bombax ceiba*, *Salmalia Malabarica*, *Gossampinus Rumphii*, and *Zizyphus jujuba*. Lac lake was first made in Calcutta in the beginning of the 19th century, and the lac dye was manufactured afterwards. Another *Coccus*, *C. Sinensis* of China, secretes a wax (*Peh-la*?) from which candles are made; and the *Coccus polonicus* of High Asia and Europe is also used in its native regions for dyeing wool, silk, and hair of a red colour.

Bees are useful in producing honey, and in Afghanistan they are semi-domesticated, as in Europe. The races on the N.W. frontier of India make openings in the walls of their houses for the bees to shelter in, and their honey is much valued. The *Langeh* bee of Borneo, and one of smaller size called *Nuang*, produce valuable honey. They generally place their nests underneath the larger branches, and the Dyaks ascend the trees by means of a rail of bamboos to reach them. A small bee of Borneo is esteemed for the wax of its honey-comb. The *Trigona laviceps* gathers the *pwai* nyet resin of Burma. Bees are not the only insects which produce wax. The *Flata limbata*, *Hutton*, an insect of the Himalaya related to the *Pœcilopectera*, produces a wax which dissolves readily in water.

Still more valuable than the species of *Coccus* are the domesticated and wild insects which produce the silks of commerce. They are of the families *Saturniidae* and *Bombycidae*, of the *Lepidoptera*. All the *Saturniidae* are silk spinners, —*Actias*, *Antheres*, *Attacus*, *Caligula*, *Oricula*,

Loepa, Neoris, Rfnaca, Rhodia, Salassa, and Saturnia; and there are about 400 species known to naturalists, but only some of the Bombycidae—Bombyx, Ocinara, Theophila, and Trilocha—produce it. The silk industry has been fostered in China from the most ancient times, the empress taking a personal interest in it, as the emperor does in that of agriculture; and in British India the wild insects yielding tasar are carefully watched. About four million pounds weight of raw silk, value about 17s. the pound, are annually imported into Great Britain, chiefly from China. The exports from India in 1877-78 were 1,512,819 lbs., value Rs. 70,35,493, to Great Britain, France, and Italy. In 1881, Great Britain imported silk to the value of £15,092,201, comprising knuba, or humma, waste, saw, thrown, and manufactured.

The blistering flies, species of *Cantharis*, *Mylabris*, and *Meloe*, though used only in medical practice, are not to be forgotten in the enumeration of insects valuable to man. *Cantharis vesicatoria* is the Spanish blistering fly. The Indian flies are *Mylabris chichorii*, *Meloe trianthema*, *Cantharis gigas*, and *C. violacea*; but *Mylabris chichorii* is that exclusively used.

The beautiful wing-cases or elytra of *Chrysocroa*, a species of *Buprestis* of a brilliant metallic green colour, are used in India, and exported to Europe, to ornament cuscus fans, baskets, etc., to be worked on muslins, and to enrich the embroidery of ladies' dresses. A species of *Buprestis* occurs in Burma of variable copper and green, burnished with transparent golden bronze. They are living gems, and Sgau Karen maidens use the wing-cases for necklaces and chaplets. The Kyen adorn themselves with the elytra of *B. ignita*. Westwood estimated the species of *Buprestis* at 1500.

The excreta of animals which would be injurious to man, are buried deep in the earth by the dung-beetles, the useful *Copridæ* and *Dynastidæ*. Some of these are of great size, with immense horn-like protuberances on the head and thorax of the males. Some of them cut the masses into round balls, which they roll to a distance, and bury an inch or two deep in the ground.—*Wall. Tr. of a Nat.* p. 95.

The *Necrophaga* are carrion feeders; and species of *Necrophorus*, *Necrodes*, *Silpha*, and *Oiceoptoma* occur in the East Indies.

A brown-black scavenger beetle of Burma, and very common, resembling *Scarabæus stercorarius* or *Geotrupes stercorarius*, selects for its burrow a bed of ordure, which it excavates two or three feet deep, and at the end of the passage forms a chamber of several inches in diameter. It is not a pellet roller.

Nature protects the otherwise helpless animals in varied ways. They are to be found on leafy plants, on withered branches, or amidst dried grasses on the ground, and so closely resembling the surrounding objects, that even when pointed to they cannot be made out by an unaccustomed eye. One mode or other of protection is followed through all the insect world. Beetles that imitate other *Coleoptera* of distinct groups are very numerous in tropical countries. The insects which others imitate always have a special protection, which leads them to be avoided as dangerous or unestable by small insectivorous animals; some

have a disgusting taste (analogous to that of the *Heliconidæ*); others have such a hard and stony covering that they cannot be crushed or digested; while a third set are very active, and armed with powerful jaws, as well as being provided with some disagreeable secretion.

The *Phasmidæ* abound in Asia, Africa, S. America, the Eastern Archipelago, and Australia. They are numerous in British India. Their varied shapes have obtained for them curious names,—spectres, phantoms, devils' horses, soldiers of Cayenne, walking sticks, walking leaves, or leaf insects (*Phyllium*), animated sticks, and, like the *Bacteria sarmentosa*, they mostly are inoffensive leaf-eating creatures, some being broad and leaf-like, while others are long and cylindrical, so as to resemble sticks or bits of withered grass. The imitative resemblance of some of these insects to the plants on which they live, and to the bits of straw and wood around them, is marvellous.—*Wallace, Tr. Nat.* p. 92.

The praying insects, the *Mantidæ*, are so called because of their habit of sitting with their long fore feet held up as if in prayer. In reality they are real tigers amongst insects, taking that position in wait for their prey, which they seize with their powerful serrated fore feet. They stand motionless, and so closely resemble the leaves as not to be easily perceived.

The true leaf insects of the East Indies are species of the genus *Phyllium*. They are the size of a moderate leaf, which their large wing-covers, and the expanded margins of the head, thorax, and legs, cause them exactly to resemble. Their green colour and the veining of their wings precisely correspond to that of their food plant.

Hymenoptera comprise the gall insect, ichneumon flies, and wasps, mason wasps, mining wasps, stinging ants, common ants, wasps, hornets, carpenter bees, honey bees, and dammer bees. They mostly have stings with which to protect themselves, and the pain from the thrust of that of the wasp, the bee, the hornet, or the ichneumon is considerable, death even resulting from the attacks of a multitude of bees. Even large birds like the myna carefully fly off to avoid the hornet's attacks.

Bugs belong to the family Hemiptera, several genera of which occur in India. Amongst others are *Cantuo ocellatus*, *Leptoscelis marginalis*, *Callidea Stockerius*, etc. Of the aquatic species, the gigantic *Belostoma Indicum* attains a size of nearly three inches. Yet some of them are most attractive in colour; a green one is often seen on leaves. They are quite inoffensive if unmolested, but if irritated exhale an offensive odour.

The larvæ of the genus *Adolia* are hairy, and sting with virulence.

Another Ceylon caterpillar of the moth *Nocera lepida*, *Cramer*, the *Limacodes graciosa*, *West.*, short, broad, pale-green, with black spines, which feeds on the *Carissa jasminiflora*, stings with fury. It occupies also the *Theaspia populnea*, and at a certain stage of its growth descends by a silken thread and hurries away.

A species of the *Hister* family, of British India and Further India, a small glossy black beetle, when touched draws up its limbs and counterfeits death to admiration.

One of the *Brachinides* of Burma, when seized,

emits, with slight snapping noises, successive discharges of aeriform vapour, which blackens the fingers like a strong acid.

Latrodectes lugubris, the kara kurt or black worm of the Kirghiz, is about the size of a finger nail. It can jump several feet, and its bite is very venomous.—*Schuyler*, ii. p. 123.

The running spiders and some of the water beetles, species of *Hydrophilus*, secure their progeny by carrying their eggs in a cocoon under the abdomen.

The object for which some insects are furnished is not apparent. Many species of the Cerambycidae beetles emit an odour resembling attar of roses.

Scolopendra phosphorea, *Mason*, of Burma, is a small centipede, which when touched suddenly becomes a living blaze, each lobe glowing like a mass of phosphorus.

All Hindus reverence the cow amongst mammals, also the Brahmany kite amongst birds, and the tulsi (*Ocimum sanctum*) amongst plants, but to no insect do they attach religious importance. In ancient times, however, the *Ateuchus Egyptiorum* was the sacred beetle of the Egyptians. It is found in Egypt and Western Asia. It has almost an exact representative of India in *Ateuchus sanctus*. It was regarded by the Egyptians as an emblem of fertility, or more probably that of eternity.

The most remarkable and gigantic insects of the old world are species of the *Scarabæus*. *S. atlas*, *Fabr.*, is said to be a native of Java, and there are four species indigenous to Nepal.

Luminous insects were styled by the Romans *Noctiluca* and *Luciola*. They are numerous in the tropics, and greatly so in some parts of the S. and E. of Asia.

The names glow-worm and fire-fly are applied to the *Lampyridæ*, a tribe of the Malacodermous Coleoptera, also to the South American *Elateridæ*, of the genus *Pyrophorus*, and to the Homopterous insect *Fulgora oculata*, which occurs in Penang, and *F. spinolæ* of Assam. *Fulgora* of Burma are said not to be luminous. *F. laternaria* is of S. America. *F. candelaria* is said to be of S.E. Asia.

Lampyris fire-fly, the *Mouche lumineuse* of the French, delights in the warm damp of the jungle. The fire-flies assemble around particular trees. *Elater cœnoscus*, *Hope*, and other species, in Nepal, frequent the oak, the alder, and the willow.

A species of *Epeira*, a large red and black spider, about Monghir on the Ganges, form gigantic webs, stretching across the paths, sufficiently strong to offer considerable opposition to a traveller. The reticulated part of the webs are of a bright yellow colour, and about five feet in diameter, but have a stretch of ten to twenty feet, including the great guy ropes, by which it is fastened to some neighbouring tree or clump of bamboos. The spider sits in the centre waiting for its prey. One of them when expanded measured six inches across the legs; and Captain Sherwill found a species of *Nectarinia* entangled in one of their webs.

The beetles which most attract attention from their size and beauty are the *Buprestidæ* and *Longicornes*. The *Anthribidæ* abound in the Malay Archipelago, and, like the *Longicornes*, have very long

antennæ. The *Eupholi* of the Papuan Islands and the *Pachyrhynchi* of the Philippines are living jewels.

The butterflies, moths, and sphynxes belong to the *Lepidoptera*, of which a greater number of species are disseminated throughout the world than of any other insect order, and many of them are of great beauty. *Phalena patroclus* of Burma is a magnificent moth.

The larvæ of *Dipsas isocrates*, a lepidopterous insect, occupy the interior of a pomegranate, which they enclose in a woven web to prevent it falling.

Deiopeia pulchella, an insect common in British India, feeds on the kernel of the seed of *Phyrostigma venenosum*, which contains a poisonous principle, and the excrement of its larvæ contains the principle of the bean unaltered.

The curious wood-moth, the Sack Trager of the Germans, the *dalone kattea* of the Singhalese, and *kundi puchi* of the Tamil people, are species of *Eumeta*, *E. Cramerii*, *Westwood*, and *E. Templetonii*, *Westwood*. They gather and cement around them a bundle of thorns, which they bind together by threads so as to form a secure case. The male at the close of the pupal rest escapes from one end of the case, but to the female it is a covering for life.—*Tennent's Ceylon*.

Deticus, an insect of the grasshopper tribe, is kept by the Chinese in cages for fighting. They live for months in captivity.—*G. Bennett*, p. 271.

Crickets are pitted against each other by the Chinese, and largely betted on.

The skip-jack beetle is a species of the *Elateridæ*, which flies into the houses in the evening. When laid on its back, it suddenly turns itself over with a clicking sound.

The activity, intelligence, and ingenuity displayed by ants have attracted attention in all ages. The curious ant, *Drepanognathus saltator*, *Jerdon* (or *Harpegnathus saltator*, *Jerdon*), one of a genus of the Peninsula of India, in Malabar, and Mysore, has the name *saltator* from its making most surprising jumps when alarmed or disturbed. It is very pugnacious, and bites and stings very severely. It makes its nest underground, generally about the roots of some plant. Its society does not consist of many individuals. It appears to feed on insects, which it often seizes alive.

Cecophylla smaragdina is a green ant of the Malay Archipelago. It is rather large, and a long-legged, active, and intelligent-looking creature. They live in large nests, formed by glueing together the edges of leaves, especially of Zingiberaceous plants. When their nest is touched, a number of the ants rush out, apparently in a great rage, stand erect, and make a loud rattling noise by tapping against the leaves.

The three families of ants, *Formicidæ*, *Poneridæ*, and *Myrmicidæ*, comprise many genera and a large number of species. Their stages of life, egg, larva, pupa, imago, are the same in all, and they have workers, imperfect females (which constitute the great majority), males, and perfect females.

Ants kill off a great number of caterpillars and other small insects.

Forêt, examining one large nest, found more than twenty-eight dead insects brought in per

minute, which would be 100,000 destroyed in a day. Many ants collect seeds.—Sir J. Lubbock on *Ants*, p. 60.

Pheidole providens, Sykes, collects large stores of grass seeds, on which it subsists from February to October. Colonel Sykes observed these ants bringing up their stores of grain to dry, and they utilize species of aphids, coccas, cercopias, centrotus, membracias.

Ant-lions are not ants, but the larvæ of species of *Myrmelon*. Their form at the lower part resembles that of a spider, but the head is armed with a sharp, strong pair of claws. These excavate in gardens, and fields, and roadways, small cone-shaped cavities, with exquisitely smooth edges and sides, at the bottom of which the ant-lion lurks, so that any insect approaching the lip of the cone immediately falls to the ambush below, and is seized and destroyed. In its perfect state it resembles the dragon-fly, but it is seldom seen.

The trap-door spider is abundant in many parts of British India, and particularly so about Ghooty in the Ceded Districts. It is a species of the genus *Oteniza*, and is of considerable size. It excavates for itself a house in the ground, of dimensions quarter the size of this page, and forms a trap lid, which fits with great nicety, and closes the instant the prey falls inside.

No country is exempt from the injuries inflicted by insects. In Great Britain, in 1881, the turnip crop suffered heavily from various insect pests. The 'fly' attack proved a heavy visitation over a large area of both England and Scotland. In some parts of Scotland, a small weevil, the *Ceuthorrhynchus contractus*, was quite as injurious as the fly, and in the south of Scotland this weevil and another closely allied joined with the fly, the result being a very heavy destruction. A ground caterpillar, the caterpillar of the turnip-moth, *Agrotis segetum*, was very mischievous in Suffolk and Kent. Cabbage also suffered from fly in Kent and Essex. In Scotland, the maggot of the cabbage-fly (*Anthomyia brassica*, and possibly in some cases *Anthomyia radicum*) was unusually and seriously injurious to garden crops of cabbage. The beet-fly (*A. betæ*), which first appeared to any serious extent in 1880, still holds its own. Hops suffered from the froghopper, or cuckoo-fly, *Eucanthus interruptus*. Planters round Alton made a machine of tarred boards on which the creatures stuck when taking their tremendous leaps, and the damage was checked. Daddy long-legs' attacks in 1880 were disastrous. The customary corn pests are wireworm, red maggot, and aphides. A wheat saw-fly made its appearance, and near Rochdale grass saw-flies of some species of *Dolerus* appeared in great numbers. The *Oscinis frit* or frit-fly is at times exceedingly destructive in Sweden. The oak suffered from the leaf-rollers and other caterpillars. Saw-fly caterpillars were injurious to pines; and near Berwick, a small beetle, *Orchestes fagi*, caused much damage to the beech leaves. Their presence is a constant source of anxiety, not unfrequently of ruin, to the farmers and planters in all parts of the world, but particularly in tropical climates. The injury from insects is not less than that from the several diseases, caries, must, and ergot, which infest the cereal grains, produced by minute cryptogamic plants (mushrooms), which

alter the perisperm, and sometimes destroy it altogether. (See Cereals.) Insects in their perfect state are not long-lived, and it is in the early stages of their existence that they cause most destruction.

The Diptera order has many insects which irritate and greatly annoy man, although not destroying life.

The *Peepaa* is one of these; it is a very small black fly, which floats like a speck before the eye. Its bite leaves a small spot of extravasated blood under the cuticle, very irritating if not opened. In British India they cling in myriads to any hanging thread, and can be destroyed by encircling them by an open cone of paper, and setting fire to its edges.

Midas ruficornis is a dipterous insect of the S.E. coast of the Peninsula of India. But the most troublesome of the mosquitos on the east coast and in Ceylon, is a species of *Culex* (*C. laniger*).

Wasps, scorpions, and centipedes often inflict painful stings and bites, which rarely prove fatal, but, except the hornets and wasps, they are rarely aggressive, only attacking man in self-defence, or when alarmed. Some of the scorpions are black coloured, but the usual tints are various shades of brown, and in the forests of the Malay Islands they occur of a green colour, and 8 to 10 inches long. Their numbers in some parts of India are great. On the plain at the Gor Naddy, in 1840, they were multitudinous.

Amongst the insects which infest books in India are two genera, which are usually regarded as accomplices in the work of destruction, but which, on the contrary, pursue and greedily feed on the larvæ of the death-watch and the numerous acari, which are believed to be the chief depredators that prey upon books. One of these malignant genera is a tiny tailless scorpion (*Chelifer*), of which three species have been noticed in Ceylon,—the *C. librorum*, *Temp.*, *C. oblongum*, *Temp.*, and *C. scaroides*, *Hermann*, the last of which, it is believed, had been introduced from Europe in Dutch and Portuguese books. Another genus of book insects is the *Lepisma*, the fish insect genus, and called so by Fabricius from its fish-like scales, tiny silvery creatures, which feast on the acari and soft-bodied insects that infest books. There have only been two species described, viz. the *L. niveofasciatus* and *L. niger*, *Temp.*; it has six legs. As insects are very destructive to books in India, and the pastes or gums employed in the bindings form special objects for the attacks of certain tribes, it may be useful to know that insects refuse to attack the gum of the cashew-nut fruit.

Mother insects deposit their eggs in localities suitable for their reception and future development, selecting the object or substance to which instinct directed them as being the best adapted to serve those ends. Water for a few, and the soil of the earth for very many, but the vegetable kingdom for vastly the greatest number, serve insects as suitable habitations for rearing their young. It is while in the state of larvæ that they consume the greatest amount of food. Those living in the interior of timber or on vegetables, or other hard substances requiring manducation, are furnished with a pair of powerful mandibles or jaws, and another and less powerful

pair of masticatory jaws or maxillæ. Those which chiefly inhabit water are of carnivorous habits, and prey upon insects smaller and softer than themselves, are furnished similarly with jaws, but adapted for seizing and destroying their prey. Such as inhabit the soil are either vegetable feeders, and conform in their structure to that section, or are carnivorous, and are hence provided with the means of obtaining their food similar to those which inhabit the water. A few have suctorial mouths, but these feed upon the juices of animal and vegetable substances, especially when such are in a state of decomposition.

The larvæ of butterflies and moths are known as caterpillars. They remain in the larva state for very varied periods; some for a brief time, others for a fortnight, a month, or several months, and in the larger Coleoptera from three to four years. During this period they are solely occupied in eating, and their voracity is immense. After passing through the pupa state, the perfect insects come forth. They can walk and fly, but have not the same voracious appetite, and do not use the same food as in the larva state. Such is the case with all butterflies and moths, but not with all beetles. Grasshoppers and dragon-flies form a general exception, for they are as voracious and as capable of devouring much food in their perfect state as they were when in the larva condition.

The locust tribe, as defined by Westwood, includes all the grasshoppers, the females of which are destitute of an exerted ovipositor, and which have the antennæ short, filiform, and with twenty or thirty joints. Locusts, at intervals of years, appear in myriads in Central and Southern Asia, Persia, and in Northern India, often after droughts, and eating up every green thing. When their larvæ are advancing along the ground, it is customary in some parts of Northern India to dig a trench in front of the advancing army, and as they tumble in, earth is shovelled in over them.

In Burma, where caterpillars appear at intervals in the paddy fields in immense numbers, devouring plants down to the roots, grass as well as paddy, moving on daily a few miles, the plan adopted in Hindustan could be usefully applied.

The itch insect (*Acarus*, *sp.*) and other parasites are a plague to man. See Louse.

Oestrus equi, of the south of Europe and Persia, is a dipterous insect. Its eggs are deposited on the hair of the horse, and licked into the stomach, and when complete, the insects pass through the canal.

Cephalemia ovis (syn. *Oestrus ovis*), of Europe and the E. Indies, lays its eggs in the nostrils of the sheep, and the worm from it occupies the frontal sinuses, and gives rise to fatal diseases.

Weevils and their allies are in immense numbers, and many species are of extreme beauty, but occasion much loss by their attacks on the cereal grains.

The scarlet mite, *Acarus telarius*, called also red spider, envelopes the leaves of a plant in a delicately woven web, which so checks the respiration that the plant becomes dry and withered.

The insects in India which are the most destructive to living and dead vegetable substances belong to five families of Coleoptera, or beetles; to two families of Hemiptera, or bugs; to one of the Neuroptera, or lace wings; and to three of the Hymenoptera.

The larvæ of the Coleoptera are armed with

formidable jaws for the manducation of the solid portions of wood upon which they feed.

The larvæ of the Buprestidæ, beetles of brilliant colours, after acquiring maturity, bore into the timber to the depth of two or three inches, and then undergo their metamorphosis. These beetles often render timber unfit for use. They have been found in the living *Acacia catechu*, the *Vatica robusta*, mango trees, and the *Pinus longifolia*. They commence underneath the bark.

The larvæ of a species of *Buprestis* was found by Mr. R. Thompson boring two or three inches into felled logs of sal (*Vatica robusta*), in the Kotree Doon. He found also another buprestis in the dead timber of a living *Acacia catechu* tree, and another in the trunk of a living mango tree. A small buprestis of a shining colour is frequently found in the timber of the Cheer pine, *Pinus longifolia*, quite destroying the logs. It is only in the bark that the females can deposit their eggs, the sapwood and newly-formed bark affording the larva nourishment; and to protect felled timber, the bark should be removed as soon as the tree is felled.

The stag-beetles, species of *Lucanus*, in India are numerous, and common as to individuals, and are, of the whole order of wood-beetles, the most destructive to living trees. Their larvæ live for three or four years in the interior of trunks of oak, and about Naini Tal barely one in ten of the trees escape their ravages. These and the larvæ of *Prionus* beetles seem exclusively to attach themselves there to the oak as their habitation. They bore to the heart of the stem, in winding passages. In felled logs they are easily killed by immersing the logs in water, or by pouring boiling water into the apertures.

The *Lucanus cervus* males often fight for the possession of the female. Their mandibles are prolonged into long horns. Two males will approach, and, entwining their mandibles, try to lift each other off their feet. Accomplishing this, the victor carries off the conquered to a distance of several feet, and then returns to the female.

Male stag-beetles have been found feeding on the renewed bark (after shaving) of *Cinchona succubra* trees, in Maskeliya, Ceylon. The female has much shorter mandibles, and is said to use them in forming a hole in the trunks of trees for the reception of its eggs. Westwood says (i. p. 187) the perfect insect feeds on the honey-dew upon the leaves of the oak; they also feed upon the sap exuding from the wounds of trees, which they lap up with their finely-ciliated maxillæ and lower lip. It has been supposed that the larva of this insect, which chiefly hides in the willow and oak, remaining in that state several years, is the animal so much esteemed by the Romans as a delicacy, and named *cosus*. The injury which it causes is often very considerable, boring not only into the solid wood, but also into the roots of the tree. The stag-beetle received from Maskeliya was a male with immense mandibles, and greatly resembled *Lucanus cervus*, the common stag-beetle of Europe.

The *Euchirus* beetles, species of the *Lamellicornes*, are said to have habits similar to their congener the stag-beetle, *Lucanus cervus*.

Euchirus longimanus, the long-armed chafer of Amboyna, drinks the sap of the sugar-palma. It is a sluggish insect.

The Xylophagi, xylophagous beetles or wood-eaters, *Bostrichus*, *Tomicus*, and species of *Hylesinus*, called Ghoon or Ghūn by the natives of N. India, live inside wood even in their perfect state, and the timber attacked by them becomes perfectly unsound. The *Tomicus monographus* is a minute cylindrical beetle of Northern Europe, of a very destructive character to felled oaks. An allied Indian species (*Tomicus perforans*) bores through the staves of beer and water casks. In 1860-62, it attacked the beer barrels of the Commissariat Department in Lower Bengal and Burma, and caused great loss. A witty subaltern styled it Tippling Tommy. Mr. Thompson has known, in Dehra Doon, a species of *Hylesinus* attack and so entirely eat the poles and rafters of houses, made of the sal tree, as to cause the roofs of the buildings to fall in; and a similar occurrence in a building in the hills, in which the *Cheer* or *Pinus longifolia* was used. The insect in this case resembled the *Hylesinus piniperda* of European forests, one species of which attacks the elm trees around London. The insects called ghoon in Northern India are omnivorous, eat bamboos, dried drugs, cheroots, pasteboard, books, and even furniture made of the lighter woods. The *Calandra granaria* is one to which the term ghoon is applied. The species of *Bostrichus* affect chiefly the dead wood of forest trees. They are the largest of the Xylophagi. Other genera, as *Scolytus*, *Hylesinus*, and *Tomicus*, are smaller but more numerous. The *Tomici* are very destructive to bamboos, which the *Hylesini* also attack. The powdery excrementitious particles which their larvæ throw out, make their presence known. The injury to the coffee plants, in Ceylon and the Peninsula, from species of *Xylotrechus*, has been often ruinous. *X. quadripes*, *Chevrolat*, is the most destructive, and whole estates in Coorg have been ruined by it. It is popularly called the worm or coffee-fly. Under the word 'Coffee' are given the known enemies to that plant.

Cerosterna gladiator, a longicorn beetle, eats the bark of the Casuarina trees, and has caused heavy losses to their planters. Cocoonut trees have great enemies in the shape of two beetles. One of these is a large *Curculio* (*Rhynchophorus*, *Sach.*), called the red beetle, nearly as big as the stag-beetle of Britain; the other is the *Oryctes rhinoceros*, so called from its projecting horn. The red beetle is so called from the red mark on the upper part of its breast. Its attacks are said to be on the nut, but those of the rhinoceros beetle are on the terminal bud of the palm stem. When so injured, the bud dies, and, the crown of the leaves falling off, leaves the cocoonut tree a mere bare stem. The same result occurs to other palms, the palmyra, the betel, in which the top bud or cabbage, as it is called, is destroyed.

Batocera rubus, the *Curuminga* beetle of Ceylon and S. India, penetrates the trunk of young cocoonut trees near the ground, and deposits its eggs near the centre. The grubs, when hatched, eat their way up through the centre to the top, where they pierce the young leaf-buds, and destroy the trees.

Spheonophorus planipennis, a weevil of Ceylon, is destructive to cocoonut trees.

Dr. Mason mentions that he found the young leaves of a *Lagerstræmia Indica* half devoured every morning, yet could not discover a single

insect throughout the day; but, on visiting it at night with a light, he found dozens of a small cockchafer beetle, species of *Melolonthidæ*, eating with great avidity.

The many dialects of Hindi, and the languages and dialects of the Dravidian and Kolarian branches of the Turanian, offer a great obstacle to any attempt to trace through their vernacular names the injurious insects of British India, but some of them may be named. The *sursuri* of Hindustan is bred in grain, the ghoon is destructive to wood and grain, and the rig is a bird-louse.

Mr. Wright mentions that in the district of Cawnpur, a spider, known as the *Agia* or *Makari*, attacks the bud of the *Sorghum vulgare* before the flower forms, and no grain follows; he says it is chiefly due to want of rain. In the month Bhadon, the pith of the stem is attacked by the thuntha, also due to want of rain, and in drought the lassi attacks it.

The *Bangka*, also called *Katua* in Hindustan, is a water-beetle which cuts rice plants. It is said to take a leaf for a boat and to paddle itself from stalk to stalk. It is harmless when the water is let off from the field.

The larva of the *Heliocopsis cupido* attacks the cotton plant in its bud.

The larva of the weevil *Deprescaria gossipiella*, the *toka* of the natives of Hindustan, attacks the cotton seeds in harvest.

The larva of *Heliocopsis cupido* is dispersed by sprinkling ashes over the plant. That of the *Deprescaria gossipiella* can be checked before storing.

As the rainy season approaches, the *Bhūngo*, a hairy caterpillar, preys on the stem leaves. The myna eats and the starling (*tilic*) destroys multitudes of these insects.

The *t'hela* disease is caused by a viviparous wingless parasite, the *Aphis lanigera*, with a flask-shaped body, six feet, two antennæ, two tubes at abdominal extremity, a haustellum for puncturing, and a sucker for extracting, and within this transparent sucker a perfect apparatus resembling a hand-pump; the sucker is fixed, the miniature piston plays, and the sap—the life-blood of the plant—is absorbed, and its leaves are destroyed.

The oily (*t'hela*) honey-dew on the leaves is greedily eaten by the red and brown ants, *Formica rufa* and *F. fusca*; and should the exudation be scanty, the ants, with their antennæ, stroke and fondle the aphid until a supply be secreted. Both sexes only exist in August, and one congress yields the young for six generations. After pairing, the female deposits eggs, which in four days animate. Immediately from every pore in their bodies springs a cottony substance, which covers and protects them, and they eat the leaf. As they grow their white cover vanishes, and pale-orange, wingless insects appear, the *Koongnee* of the Jats.

The *Aphis lanigera* does not attack cotton plants growing near hemp. They are destroyed by the lady-bird (*Coccinella*) and by the lace-wing (*Chyrosopus*).

The cucumber family of plants is largely preyed upon by a twelve-spotted beetle like a lady-bird, which, alike in the grub and the perfect state, feeds on the leaves and flower-buds.

Some of the *Hylesini* bore to the centre of the felled *Cheer* (*Pinus longifolia*) to the depth of a foot, attacking in vast numbers, but only if the

bark be left on. Ghoon of Hindustan seems a generic term for all beetle-like insects which attack timber, grains, etc. Timber and bamboo traders destroy the timber ghoon by depriving them of air, by immersing the affected articles in water for a few weeks. They are also killed by being buried. Tar or paint have no effect on them. The Hylesini are the genus *Apat* of Fabricius.

The genera *Tomicus* and *Bostrichus* are largely distributed over all India.

A Burma species of the *Bostrichidae*, with its larvæ, is exceedingly destructive to bamboos. In the course of one rain they will sometimes utterly destroy a dwelling the bamboos of which had been felled in the preceding dry season, while bamboos felled at the close of the rains remained unharmed.

Saw-flies, *Tenthredo*, and their pseudo-caterpillars, never attack wood. They do comparatively little damage.

The longicornes are a highly-diversified family of beetles. They attack dead vegetable matter. A remarkable larva, thought to be one of the *Prionii*, was found in the stem of the tea plant in Northern India. The mother beetle punctured the main stem of the plant near the ground, and inserted the egg, and the larva, when hatched, bored into the pith of the stem, and then bored down and up, destroying the plant. Mr. Thompson offers no suggestion how to destroy them.

The beetle *Cerambyx vatica*, *Thompson*, attacks the sal or *Vatica robusta* when felled. These insects grow to a great size, but never attack the tree when its bark has been removed. This and the little *buprestis* are the only beetles which attack the *Vatica robusta*. The larvæ, soft-bodied grubs, of the *Cerambycidae* and *Buprestidae* can easily be destroyed by pouring scalding water into their holes, or by immersing the logs in water for a couple of days. Hot winds which dry the timber, and also much rain, kill them. In their larva state these insects are open to the attacks of both the parasitical ichneumons and acari, the larvæ of which feed upon the young grubs. Toon (*Cedrela toona*) and sissoo (*Dalbergia sissoo*) are both attacked by a larger and more powerful *Cerambyx* than that found on the *Vatica robusta*.

Rottlera tinctoria, the rewneah of Northern India, is constantly attacked by another *Cerambyx*, the larva of which is over four inches in length, and as thick as a man's thumb.

The larvæ of the capricorn beetles are called, in Hindi, *Mukora*. There are four kinds of *Mukora* recognised in Northern India, and they attack the *Vatica robusta* and the pine.

A minute species of the *Cerambyx* attacks the living bark of the *Acacia catechu*, and their presence may always be detected by the gummy exudation which their presence within the tree occasions. *Cerambyx vatica*, or sal-grub, burrows in the wood of that tree, and is sought for by the woodpeckers.

A small species of *Leptura*, in Northern India, attacks the harder woods. They have been found in the wood of the goug-creeper, a species of *Robinia*.

Species of *Saperda* also occur in the northern forests of India.

Monochamus soongna, *Thompson*, is one of the

Cerambycidae. It is a magnificent beetle, and its larva is very destructive to the *Bombax heptaphyllum* (or seemul), also the *Soongna* or *Moringa pterygosperma*, and the roongra or *Erythrina suberosa*. Its larva is very large, and armed with powerful mandibles.

Another *Monochamus* beetle enters the trunk of the *Salix tetrasperma*, and bores it in all directions.

A *Monochamus* attacks the *Butea frondosa*. *Leptura* has been found on the *Robinia macrophylla*, *Vatica robusta*, the bamboo, and species of *Dalbergia*.

Pupæ of another *Monochamus* beetle were discovered underneath the bark of the *Butea frondosa*, and in logs of the *Odina wodier* and *Bombax heptaphyllum*. They were found in solid cocoons made of a substance resembling lime. The shell was fully one-sixteenth of an inch in thickness, quite hard and firm.

Hemiptera are exemplified in the common house bug and all the aphides or plant lice.

Hemipterous insects do not undergo a complete metamorphosis. After being hatched from eggs laid by the parent insect, the larvæ and pupæ remain much alike. Their fecundity is enormous. In the Kamaon forests a large and magnificent red bug, two inches long, has been observed sucking the stones of the *Cordia myxa*. By piercing the soft stems of young plants, they cause thousands to perish in a single day.

A green bug of Burma, one of the *Tingidae*, is very injurious to fruit. They suck the juice of oranges through the skin. The paddy bug of Burma sucks the paddy before the kernel has become hard. It is a species of *Cimex*, or one of the *Scutelleridae*, and whole fields of rice are sometimes abandoned in consequence of the devastation it commits.

Some bugs are beautifully and brilliantly coloured, but bugs, both field and house, emit usually a disagreeable odour.

The Aphides, or plant lice, when in large numbers, injure young shoots and twigs. A very pretty little one is found in Kamaon on the dabree tree. They excrete a white substance of a sweet taste, which cakes on the leaves. Another aphid is found on the sal or *Vatica robusta*.

Aphis *Coffea*, the coffee louse, is found in small communities on the young shoots, and on the underside of the leaves of the coconut tree, but occasion little injury.

Neuropterous insects, like the dragon-flies, are carnivorous or herbivorous. The fecundity of the white ant is enormous, and they have males, females, and neuters. They will not touch fresh Huldu timber, but, on drying, the wood will be attacked.

Hymenopterous insects are exemplified in the bees, wasps, black ants, and flies. Many live in societies, and are divided into three classes,—males, females, and neuters. Of their larva, some are carnivorous, some herbivorous; the perfect insects, however, live chiefly upon flowers and honey. A few are carnivorous and omnivorous, as, for example, black ants.

The *Xylocopa*, or carpenter bees, bore tunnels in timber, where they gather in honey and the farina of flowers, leaving a lump of this compound in a divided cell for the nourishment of the young larvæ, sub-cylindrical, whitish worms, when they are

hatched. Each cell has, with the egg, a separate supply of this food. In the Kamaon forests there are three species of *Xylocopa*,—*X. purpurea*, *Xylocopa ficea*, *Thompson*, and a species found on the *Nuclea cordifolia*. This genus lives in colonies. They will not attack wood smeared over with tar, and will leave their habitations if it be applied to the canals.

Of the weevil family, the Rhynchophora, the genera *Bruchus*, *Calandra*, *Curculio*, and *Rhynchonotus* are extremely injurious to vegetables, boring into the young stems of plants, and living upon their juices. The *Curculio* also injure felled timber by boring into it. One species or variety of *Curculio*, one inch in diameter, was found by Mr. Thompson several inches deep in a log of the *Butea frondosa*. His observations satisfied him that these were bred in the wood. A Burma species of *Curculio* makes great havoc among the mangoes.

The ravages of some of the smaller weevils, *Bruchus* and *Rhynchites*, are highly detrimental to the productiveness of the northern forests of India. In 1863, entire seed crops of the *Vatica robusta* were destroyed. This family insert their eggs into the stigma of the flower, and the young larva becomes developed in the fruit or pericarp, and the fruit ultimately falls. The common grain beetle is a good illustration of the genus *Bruchus*. The species of this genus attack most leguminous seed-pods, peas, beans, gram, etc.

Barrah, a wood-louse in Swat, which infests mo-ques and houses where old mats are lying about; the place bitten by them becomes red and inflamed. The insect is of the shape of a bug, but larger.—*Lt.-Col. MacGregor*.

Two species of the genus *Bruchus* attack the poppy seed when stored.

A longish weevil, seemingly a species of *Lixus*, one of the divisions into which the *Longirostres* have been made, was constantly found by Mr. Thompson under the bark of felled logs. It bores with facility through the softer parts of wood.

Calandra granaria is known to the people as the Ghoon, also the Ch'heda and Makora; it is a weevil very destructive to grain. Ghoon and Ghoongi in Hindustan seem to be applied as names to several insects destructive to grain and wood.

The enemies of the coffee plant are numerous, and notices of most of them will be found under the word 'Coffee.'

Mr. Haldane, in a pamphlet entitled 'All about Grubs,' mentions several beetles which injure coffee trees. The most important is the Big Patua cockchafer (*Lepidista pinguis*, *Burm.*). The female of this beetle is nearly white; the male is brown, and was named *Melolontha rubiginosa* by Mr. F. Walker. Another smaller brown species of chafer mentioned by Mr. Haldane is *Ancylonycha pinguis*, *Walker*. A third species, pale green with yellow margins, is *Mimela xanthorhina*, *Hope*.

Lecanium coffeæ, a genus of the order Hemiptera, appears on the young shoots and buds, like small, wart-like bodies. Each of these warts is a transformed female containing about 700 eggs, which are hatched within it. When the young ones come out of their nest, they may be observed

running about and looking like wood-lice. Shortly after being hatched, the males seek the undersides of the leaves, while the females prefer the young shoots as their place of abode. The larvæ of the males undergo transformation in pupa beneath their own skins; their wings are horizontal, and their possessing wings may probably explain the fact of the comparatively rare presence of the male on the bushes. The female retains her power of locomotion until nearly her full size, and it is about this time that her impregnation takes place. Each tree on which this bug makes its appearance should be well dusted with a mixture of pounded saltpetre and quicklime in equal parts; by sponging the parts affected with a mixture of soft soap, tar, tobacco, and turpentine. Another species of *Lecanium*, in another country, put a stop to the cultivation of the orange as an article of commerce.—*Tennent's Ceylon*, pp. 4, 46.

The coffee tree is supposed to have been brought to Ceylon about the middle of the 17th century. The first regularly worked estate was opened in 1825; but the bug does not seem to have appeared in large quantities till 1845, when, however, it began to spread with such rapidity that in 1847 a very general alarm was taken by the planters, about the same time that the potato, wine, and olive diseases began to create alarm in Europe. The coffee bug seems, however, to be indigenous in Ceylon, for the white bug has been found in orange, guava, and other trees, as also on beet-root and other vegetables; and the brown bug attacks the guava, hibiscus, Ixora, Justicia, and orange trees,—indeed, every plant and tree and even the weeds on a coffee estate, particularly such as are in gardens.

Heliothis armigera is an insect of the family Noctuidæ, which, in the seasons 1877-78, in innumerable hordes attacked the coffee crops of Shahabad and Patna. It is equally destructive to the cotton crops. It eats into the capsules of the coffee and cotton. The pupæ become entrapped in the capsules. Its attacks on the coffee plant are principally in February and March. Careful hand-picking is the sole remedy.

Helicopsis cupido or *Deprescaria gossypium* attacks the cotton plant; it is the Toka of Hindustan.

The larva of the *Gracillaria coffeifoliella* mines the coffee trees. It is very common.

Hemileia vastatrix, the coffee leaf disease, or leaf fungus, has for several years seriously affected the coffee trees of the island of Ceylon. Though requiring careful inspection for its detection, it was present upon all the coffee trees examined about 1879. With the help of the microscope, it is found at all times to prevail the greater part of the stems and older leaves, in the form of very fine branching filaments, its effects being apparent in numerous somewhat translucent spots, which may be observed when holding one of the older leaves against the light. The direct injury so caused to the coffee tree is, however, very slight, as compared with the effect produced when the fungus attacks the young leaves, causing them to fall prematurely. The presence of the fungus-filaments in such abundance on the outer surface of the tree is quite sufficient to account for phenomena which it was first thought must be attributable to a poisoning of the juices of the tree,

by an absorption of the fungus matter through its roots. The latter idea must therefore be given up, and the disease considered as external, except when it appears within the tissue of the young leaves. Subsequently, from these enclosed masses of filaments short branches are produced, which emerge from the pores, and bear the conspicuous orange-coloured spores or reproductive bodies. Some of these spores have been observed to germinate on the outside of the leaf, producing branched filaments of exceeding tenuity, which grow with marvellous rapidity all over the surface of the leaf, and beyond to the stems. The ends of some of these filaments, too, have been observed to enter the pores of the leaf, to form fresh disease spots and fresh crops of spores. The true Liberian coffee is said to be of hardy habit, and more able to resist the ravages of this disease.

The caterpillars found on the coffee trees of Ceylon are *Orgyia Ceylanica*, *Euproctis virguncula*, *Trichia exigua*, *Narosa conspersa*, *Limacodes graciosa*, and a species of *Drepana*, but they do not cause much injury. One caterpillar, however, the *Zeuzera coffea*, destroys many trees, both young and old, by eating out the heart. It resembles the caterpillar of the great moth of England, and is as thick as a goose quill. It generally enters the tree 6 to 12 inches from the ground, and makes its way upwards. The sickly drooping of the tree marks its presence. Caterpillars of the *Boarmia leucostigmata* and *B. Ceylanica*, also those of *Eupithecia coffearia*, are found on coffee and other trees in Ceylon from September to December. Some Ceylon caterpillars sting. A greenish one, that occupies the *Thespesia populnea* (Suriya, SINGH.), at a certain stage of its growth, descends by a silken thread, and hurries away. The moth of this is supposed to be a *Bombyx*, named *Cnethocampa*, Stephens. Another, short, broad, and pale-green, with fleshy spines, that feeds on the *Carissa jasminiflora*, and stings with fury, is of the moth *Nocera lepida*, Cramer (the *Limacodes graciosa*, West.). The larvae of the genus *Adolia* are hairy, and sting with virulence. Many exactly resemble in tint the leaves they feed upon, others are like little brown twigs, and many are so strangely marked or humped, that when motionless they can hardly be taken to be living creatures at all.—Tennent's Ceylon. See Larva.

Bakoli is a small green caterpillar that destroys rice crops.

Many caterpillars avoid cabbages if dill be grown in their beds, others keep aloof from gooseberry bushes if broad beans be grown near, and the use of pyrethrum is said to protect vines from the *Phylloxera*; and other insects avoid places sown with hemp.

White ants and crickets are the inveterate enemies of the tea plant. Whole acres of young plants have been known to be destroyed by these destructive insects. It has therefore been considered advisable to fire, instead of fell, jungle required to be reclaimed for the purpose of tea-planting.

A beetle, supposed to be one of the *Melolonthidae*, about the middle of the 19th century infested the tea plantations in the Dehra Doon. Ten or twenty of them lay concealed two or three inches deep in the earth beneath the bush, and emerged at night to feed on the leaves. The existence of the

plantation was threatened. But a party of labourers was told off, each with a hoe, twice daily to dig around the plants, and the beetles were seized and destroyed by boiling water. Bushels of beetles were gathered and destroyed, and the plantation freed from them.

The following insects injurious to the poppy and other crops were collected in the gardens at Deegah, Dinapore, and Bankapore:—

A. Attacking the young poppy plant in November and December, viz.:

Acheta campestris and *A. domestica*; also other species of *Acheta*.

Gryllus species, called in Hindi *ghudya* and *phunga*. *Gryllotalpa vulgaris*, the goorghooria in Hindi.

B. Attacking the maturing poppy in February and March, viz.:

Heliothis armigera.

Noctua species.

Bombyx species, the Buro-bhoon.

" " the Bhoon of Hindi.

" " the Kala-jhanga of Hindi.

Gryllus species.

C. Attacking poppy seeds in granaries:

Tetranychus papaveræ, the poppy seed mite.

Tipula species.

Bruchus "

Sitona "

Calandra "

D. Attacking cold weather or rabi crops:

Species of *Aphis*, *Cassida* or tortoise beetles, lady-birds;

Haltica, sp.; *Coccinella*, sp.; *Thyia eucharis*;

Locusta, sp.

Of these, it may be mentioned that the crickets, *Acheta*, *A. campestris*, *A. domestica*, and other species called the Jhengur or Jhanga of Hindustan, attack the poppy plants from November to January, until the stem begins to shoot. A large species of this genus attacks the *Casuarina* trees. It lodges at the foot of the tree, and at nightfall ascends the tree, and cuts off the young top shoots. The crickets are very destructive to garden and field crops.

The crane-fly, a species of *Tipula*, is allied to a gnat. Its grub is a pest of the young poppy plant, both on and under the surface of the soil.

Bala, HIND., is a grub which eats the young shoots of wheat or barley when about six inches high.

The Girwa or Girwi, HIND., an insect? which turns the grain crop of a brick-dust colour.

Gindar, HIND., an insect very destructive to growing crops of pulse.

Æcidium Thomsoni infests the fir tree *Abies Smithiana*.

About the year 1879-80, an insect in Monghir threatened to become very destructive to the rice crops. Mr. Wood Mason identified it as belonging to the genus *Cecidomyia*, and as related to the Hessian fly which ravaged the wheat fields in the United States. This genus, Mr. Wood Mason says, had never before been found in India, and he proposed to call the species *Cecidomyia oryzae*, or the rice-fly. He considered it as likely to prove a most formidable pest, and recommended that the district officers should be instructed to make further inquiries, and carefully watch its progress.

The common rice weevil of India is the *Sitophilus oryzae*.

The Barar, HIND., is a disease? which attacks the rice crops.

Badhiya, HIND., is a disease? attacking growing sorghum, penicillaria, and zea, which prevents the ear filling.

A species of *Cetonia* is very destructive to roses and other flowers.

An insect, known as the nutmeg insect, attacks that nut, and to avoid it they are dried in the shells.

The stores of soldiers' coats were much damaged in India by a little beetle, *Anthrenus vorax*, *Waterhouse*.

The Honourable Mr. Morrison mentions (Compendious Summary) that cargoes of salt cod were brought to China from England, but only for two years, as it was found to breed an insect which bored through the ship's timbers.

The ravages of the Doorkhee or Durkhi insect are very destructive to the young indigo plant.

Gryllotalpa vulgaris is the mole cricket.

The Goorghoogah or Goorghooriah, HIND., occurs in the temperate and tropical regions of the Old World; it is of nocturnal habits, and is a destructive creature to all vegetable products. In Dinapore and Bankapore it attacks the young poppy plant in November and December.

The most troublesome of the mosquitos on the coast of Ceylon is the *Culex laniger*.

Two species of *Gryllus*, called ghudya and phunga in Hindi, in Lower Bengal attack the young poppy plant in November and December.

Of the locusts which at intervals devastate some countries, the *Acridium* (*Gryllus*) *migratorium* is that of Africa and the south of Asia, and *G. gregarius* that of Sinai. The migratory locust, *Acridium* (or *Ædipodium*) *migratorium*, which occurs in Africa and the south of Asia, is greenish, with transparent elytra of a dirty grey, whitish wings, and pink legs. They have the power of inflating themselves with air, and of travelling about eighteen miles a day. They are bred in the deserts of Arabia and Tartary. Cajaput oil protects books.

Insects are easily killed by kerosine emulsion. Pure kerosine, 1 gallon; condensed milk, 1½ pint; water, 3 pints. Mix the water and milk before adding the oil, and churn until the whole solidifies and forms a butter. In using it, dilute the butter with from 12 to 16 times its weight of water, and then apply immediately. If allowed to stand, the butter separates and rises to the surface.—*Bengal As. Soc. Journ.*, No. xxxi. p. 426; *Bennett*; *Buckland's Curiosities of Natural History*, 1857; *English Cyclopædia*; *Figuiet, Insect Life*; *Hooker, Himalayan Journal*; *Mr. Hope in Madras Lit. Soc. Journ.*, 1840; *Kirby and Spence*; *Huxley, Introduction to the Classification of Animals*; *O'Shaughnessy, Mat. Med.*; *Royle, Mat. Med.*; *Royle on the Productive Resources of India*; *Tennent's Sketches of the Natural History of Ceylon*, pp. 442-446; *Tennent's Ceylon*; *Thompson on Insects destructive to Woods and Forests*; *Wallace, Tropical Nature*; *Crawford's Dictionary*; *Ceylon Observer*.

INSESSORES, an order of birds, known also as the Perchers, very numerous in India. They form the great bulk of the feathered creation, nearly three-fourths of all known birds belonging

to this order, in the tribes denti-rostræ, conirostræ, tenuirostræ, fissirostræ, and scansoræ,—swallows, martins, swifts, night-jars, bee-eaters, rollers, kingfishers, wagtails, some of the pipits and larks, stonechats, several warblers, and the thrushes.

INULA CHINENSIS. *Smith*. Siuen-fuh-hwa, CHIN. Grown in China since the 6th century. It has a beautiful, golden-yellow, composite flower. *I. Royleana* grows in the Kaashmir Hills; but the plant is considered poisonous, and is not used.—*Honigberger*, p. 290; *Smith, Mat. Med. Chin.*

INUNDATIONS are of frequent occurrence in India from rainfalls and from storm-waves, and have been noticed under the headings 'Floods' and 'Cyclones.' The most calamitous have been from storm-waves striking the Coromandel coast and the islands at the delta of the Ganges. The cyclones have been examined by Colonel Capper of Madras, Mr. Redfield of the United States, Professor Dove, Lieutenant-Colonel Reid, Mr. Piddington of Calcutta, who suggested the term cyclone; also by Mr. Espy of Philadelphia, and by Messrs. Meldrum, Blanford, Wilson, and Elliot. Those of the Laccadive Islands, in a hurricane of April 1847, were described by Captain Biden in *Madras Spectator*, 1st, and *Bombay Times*, 4th October 1847, and in the *Bombay Times*, 13th August 1850. An account of remarkable inundations in India in 1849 was given by Dr. Buist in *Bl. As. Trans.*, 1851, and *Edin. Phil. J.*, 1851; and inundations of the Brahmaputra in Assam were described by Dr. M'Cosh in *Topography* of 1837. Inundations occurred of the Ganges on 21st August 1838, when it rose at Allahabad 43 feet, and did immense damage at Benares. Hoshangabad was on the same occasion flooded by the rise of the Nerbadda. One of the Indus, in 1841, supposed to have been occasioned by the bursting of a glacier, was described in *Bl. As. Trans.*, 1848, xviii. Those of the Tapti, for the past thirty years, were described in *Bombay Times*, 1851. Inundations at the mouth of the Ganges, occasioned by hurricanes, occurred in May 1823 and May 1830, *Bl. As. Trans.* i. p. 25; and the great storm-wave which struck the coast at the estuary of the Megna at 3 A.M. of the 1st November, in which 215,000 persons perished, was described by Mr. J. Elliot.

INVOCATION. The eastern Christians commence their writings with the words, 'In the name of the Father, the Son, and of the Holy Ghost;' the Jews, 'In the name of the Great God;' the Arabs, 'In the name of God, the Compassionate, the Merciful.' The Muhammadans in India, in all letters or memoranda, place the Alif letter, for Allah, God, at the top of the first page of their writings. Hindus invoke the deity Ganesh under the title of Sri. The Persian magi used to begin with 'In the name of the Most Merciful, Just God.'—*Lane's Koran*, p. 86.

IODINE—Iode, FR., Iod, GER., from *ἰώδης*, violet, the colour of its vapour—was obtained by M. Courtois in 1812 in the residual liquor of the process for obtaining soda from kelp. It is found in sea and several mineral waters, and in sponge, corals, some molluscous animals, and amongst the seaweeds in *Fucus vesiculosus*, *Linn.*, *F. nodosus*,

IONIA.

Linn., and others. The leaf of a seaweed (a species of *Laminaria*, *Dr. Falconer*) employed in the Himalaya is called goitre-leaf, gular-ka-patta. In S. America, the stems of a seaweed are sold by the name of goitre-sticks, because they are chewed by the inhabitants wherever goitre is prevalent. Iodine could be procured by burning large quantities of seaweed, or of the conferva of the salt-water lake near Calcutta; but the process is only economical where the weeds yield enough of impure carbonate of soda to cover the general expense of this operation.—*Reng. Phar.*

IONIA. This name occurs in ancient Sanskrit writings, and is supposed to refer to the Bactrian Greeks. See Javan; Kābul; Veda.

IONIDIUM SUFRUTICOSUM. IV. and A.

Viola anfruticosa, Roxb., Linn.

Nunbora, . . . BENG.	Nela kobbari, . . . TEL.
Ruttun puruss, . . . DUK.	Purusha ratnam, . . . "
Urela-tamara, MAL., TAM.	Surya kanti chettu, . . . "
Charati, . . . SANSE.	

A rugged and somewhat prickly reclining herb, having a small crimson flower. It is common over the Peninsula of India, and is used as a demulcent.

IPECACUANHA.

Amerikanische brech- wurzel, . . . GER.	Cipo-de-camaras, . . . PORT.
Ipecacanna, . . . IT.	Raiz de Oro, . . . SP.

Cephaelis ipecacuanha, a herb indigenous in the shady forests of E. Brazil, southwards to San Paulo. The root (rhizome) affords the valuable emetic medicine.

IPOMŒA, a genus of plants of the natural family *Convolvulaceæ*. The species and varieties in India are about fifty, pretty creepers flowering in the morning. In China, many beautiful species are cultivated. *Dr. Honigberger* received the seeds of *I. dasysperma* from Hindustan as an antidote to hydrophobia. It is called *Kut'te-kibinj*, i.e. the seeds for dogs. In October, as soon as the rains close, *I. pileata*, a pretty little twining species, is seen blushing through every hedge and bush in Tenasserim. It is peculiar for its concave bonnet-shaped involucre, in the midst of which half-a-dozen tiny blossoms hide their rosy lips. *I. reniformis*, *Perretay-keeray*, TAM., is a perennial creeper with yellow flowers; the leaves used as greens mixed with tamarind; very common during the cold months. *I. sepiaaria*, *Thalee-keeray*, TAM., is a climbing perennial plant with rose-coloured flowers, found in hedges; the leaves are eaten mixed with others as greens. *I. sessiliflora*, *Roth.*, *Bhanwar*, HIND., occurs sparingly in the Panjab plains, up to the western frontier. It is eaten in India in famines. *I. triloba* grows both wild and planted in Japan. The roots are either white or black; the latter are used as laxatives.—*Honigberger*, p. 201; *Mason*; *Jaffrey*; *Stewart*; *Thunb. Tr.* iii. p. 63.

IPOMŒA PES-CAPRÆ. Sweet.

<i>I. maritima</i> , R. Br.	<i>Convolvulus pes-capræ</i> , Linn.
<i>I. orbicularis</i> , Ell.	
<i>I. carnosa</i> , R. Br.	<i>C. maritimus</i> , Desr.
<i>I. brasiliensis</i> , Meyer.	<i>C. bilobatus</i> , Roxb., RA.
<i>I. biloba</i> , Forsk.	<i>C. baubiniifolius</i> , Salisb.
Chagul khuri, . . . BENG.	Beda tige, . . . TEL.
Goat's-foot creeper, ENG.	Balabandi tige, . . . "
Do-patte-luta, . . . HIND.	Chevulla pilli tige, . . . "

This is a useful sand-binding plant on the shores of the south and east of Asia, and has the wildest range, trailing over the sandy beaches

IRAN.

along the coasts of India, and from Hainan to the Chusan Archipelago.—*Williams' Middle Kingdom*.

IPOMŒA PES-TIGRIDIS. Linn.

Tiger's-foot ipomœa, Eng.	Pora batul, . . . HIND.
Kunra, . . . HIND.	Mekamu adugu, . . . TEL.

In Tenasserim, the tiger-footed ipomœa, with large palmated leaves, is not uncommon; very common in the rains everywhere in Rajputana.

IPOMŒA REPTANS. Poir.

Ganthian, . . . HIND.	Vari, Nali, . . . TAM.
Vellay-keeray, . . . TAM.	Tota-kura, . . . TEL.

A creeping; annual with rose-coloured flowers, found about the borders of tanks and moist places. The leaves are used as greens, and in some places its root also appears to be eaten.—*Jaffrey*.

IPOMŒA TUBEROSA, *Linn.*, the Malabar creeper, a native of tropical America, is a climbing plant with a woody stem; leaves palmated seven parted. Flowers yellow and showy, appear in October and November. It is in general use for covering old walls, trellises, etc.—*Riddell*.

IPOMŒA TURPETHUM. R. Br. Turbeth.

Convolvulus turpethum, Linn.

Hud-ul-zangi, . . . ARAB.	Chita-bansa of, . . . PANJ.
Teori, Dud kulmi, BENG.	Trivurta, . . . SANKH.
Nag-putta, Turbad, HIND.	Trasta-waiu, . . . SINGH.
Tarwai, Tirwi, . . . "	Shevadi, . . . TAM.
Nasut, Niswut, . . . "	Tegada, . . . TEL.

A native of all the E. Indies, Archipelago, Australia, Polynesia, Tinian, etc. Its root is perennial, and has long been employed in India as a purgative, rubbing up a slip of the bark with water or milk on a stone, and swallowing the emulsion thus formed. A strip 6 inches in length from a root as thick as the little finger, is deemed a sufficient dose. The action of the medicine is extremely uncertain. It is considered beneficial in diseases of the mucous membrane, in leprosy, and paralysis. It contains a purgative resin resembling that of jalap.—*O'Sh.*; *Stew.*; *Powell*.

IRAK, a geographical term for part of Persia and part of Arabia, the Irak-i-Ajami and Irak-i-Arabi. The Euphrates and the Tigris have a generally parallel course. At Baghdad they approach most closely before uniting, not far above the outlet in the Persian Gulf, giving the included land the shape of an hour-glass. This included land is the Mesopotamia of the ancients; the northern half being now known to the Arabs as Al Jazirah or the island, and the southern as Irak Arabi, to distinguish it from the neighbouring Persian territory, the Irak Ajami, the ancient Media.

IRAN, a region to the south-east of the Caspian Sea, which extends for 1280 miles from Sumeisat on the Upper Euphrates eastward to Taxila on the Indus, and nearly 900 miles in breadth from the shores of Gedrosia, in lat. 25° N., to the banks of the Oxus near Samarcand, in lat. 40° N. The latter river and the Caspian Sea form the northern limit of this great division; the Persian Gulf is on the southern, whilst the rivers Indus and Euphrates constitute the eastern and western extremities. In this wide expanse of territory, stretching, with various elevation, at least 25° from north to south, such extremes may be looked for as will bear out the remarkable description of the younger Cyrus. 'In the dominions of my father,' said the prince, 'people perish with cold at the one extremity, whilst they are suffocated with heat at the other' (*Xenophon's*

Anabasis, Book i. pp. 67, 68, Ed. Hutch, 1735). Thus the northern and central portions of the plateau of Iran and Arabia, as well as a great part of Asia Minor, enjoy a temperate climate, whilst an intense cold occurs in the northern parts of Afghanistan, in nearly the whole of Kurdistan, and on the elevated mountain ranges and high valleys on both sides of Ararat. Yet, notwithstanding this difference of climate, throughout the whole a great similarity prevails in the vegetable and animal worlds. The surface of Iran may, in a general way, be described as consisting of a wide-spreading plateau, flanked by mountainous countries on the east and west, and bounded to the north and south by two mountain chains, outside of which are two extensive plains on a much lower level. Of these, Turkomania, with the continuous plain westward of it, between the Caspian Sea and the Elburz mountains, form that which is on the northern extremity; Arabian Irak and Khuzistan, with the rest of the level tract outside the Zagros, form the plain at the southern extremity. In the space intervening between the great mountain chains, the surface in most places is largely impregnated with salt and saltpetre, which prevail to some extent on the plains of Fars and the conterminous provinces of Irak and Kirman. Between Abushahr and Dalaki, crystallized sulphate of lime is found; and a little westward, in Khuzistan, an abundant supply of sulphur; while rock-salt, alum, antimony, and orpiment, as well as mineral waters, are found in abundance in different states, also petroleum and naphtha. Iron is met with in Masandaran, Khorasan, and Bactria, and, with copper and lead ores, more abundantly in the pashaliks of Diyar-Bekr and Sivas, with the addition of gold, silver, and precious stones. Copper and other ores abound in Kurdistan, the Julamerik, and other mountain districts. In the Dumbu Tagh mountains, the granite abounds with topaz, beryl, schorl, and disseminated gold. Extensive salt lakes and streams, impregnated with the same substance, occur. Amongst the former may be mentioned the Caspian Sea, the picturesque Urumiyah, and Van Zerrah or Durrah in Seistan, Bakhtegan in Fars, and others; the fresh-water lakes are only met with in the tracts below Babylon, and again between the Elburz range on the shores of the Caspian.

The language of modern Iran is laden with Arabic and Turkish words; but in the E. the language is much like that in which Ferdusi wrote his poem, free from words of Arabic origin.

There are four distinct kinds of horses in Iran: 1st, the original Turkoman breed, a large, powerful, enduring animal; 2d, the yaboo, or common carrying hack, which is stouter and rather larger than the galloway; then the smaller Arabian breed (first introduced by Nadir Shah); and lastly, a fourth, between the Arabian and the Turkoman horse, the badpai (wind-footed), which, being the most prized by the Persians, is almost always among the horses of a great man's retinue. Mules, though small, are much used for caravans. This animal seldom goes less than 30 miles in a day, though carrying a load of about 3 cwt., and passing over such kotals or passes as would appal even a Spanish muleteer. Perhaps one-third of the inhabitants of Iran are nomadic, and this section, by its habits as well as mode of life, constitutes a

race separate from the other or fixed portion, which consists of Persians, Kurds, Armenians, Arabs, Jews, and Parsees.

IRANIAN RACES, called also Indo-Atlantics, also Caucasians, have always been known for their refinement and high civilisation, from which Europe borrowed through the Byzantine and Greek culture, and the Persians have long and faithfully retained the features of its national characteristics. Though overrun by the Semitic and Turanian races, the Iranian has borrowed little or nothing from them, but has exerted over them a powerful influence. According to Khanikoff, Sur l'Ethnographie de la Perse, the Iranian race of Persia came from the E. of modern Persia, about Segestan and Khorasan, and moved to the W., in pre-historic ages, and though altered by the attacks of the Turko-Tartar tribes from the north, or, where in contact, on the W. and S., with Turanian and Semitic elements, the Medo is everywhere recognisable as the same as described by Herodotus and later Greek writers. The arrow-headed writing at Persepolis enumerates the Iranian people of that day.

The form of the Iranian is spare but elegant, even noble, but there have always been differences between the E. and W. Iranians.

The E. Iranians are—(a) the Segestani or Khafi, (b) Char Aimak, (c) Tajak and Sart; each of which counts many subdivisions.

The principal number of the Segestan people occupy Khaf and its neighbourhood, Ruy, Tebbes, and Birjan.

The people of Khorasan are greatly intermixed with Turko-Tartar elements.

The *Char Aimak* consists of four peoples, the Taimuri, Taimuni, Firoz Kohi, and Janshidi, all of them of Iranian origin, and all speaking Persian. The Aimak, who graze their flocks in the Paropamisus, are brave and relentless, and Afghans, when travelling, whether proceeding from Balkh, Kabul, Kandahar, or Herat, never enter into the mountain districts of these intrepid nomade tribes. Each member of the *Char Aimak* knows no greater enemy than the Afghan, and all attempts to form Afghan colonies amongst them have failed.

The *Taimuri* dwell at Gorian and Kuh'sun, on the western boundary of Herat, and in the villages and towns situated E. of Iran, from Tarbat Shaikh Jam as far as Khaf. About a thousand of their families dwell near Herat.

The *Taimuni* dwell in the Jolgha-i-Herat, from Kerrukh to Sabzwar, the few who have extended to Farrah being styled by the Afghans Parsaivan. The Taimuni are of a wild, warlike nature, though agricultural.

The *Firoz Kohi*, a small number of people, about 8000, dwell on the steep hill N.E. of Kala-i-No, and from their inaccessible position afflict their whole neighbourhood with their robbing and plundering. Kala-i-No, on the summit of the mountain, and the fortified places of Darz-i-Cutch and Chaksaran, are considered similar to the nests of the Bakhtiari and Luri in the environs of Isfahan. They have a resemblance to the Hazara, but their forehead, chin, complexion, and figure are less Turanian. They are decidedly Iranian. They take their name, the *Firoz Kohi*, after the city of that name, about 63 miles from Teheran. Timur settled them by force in Masandaran, but they soon returned to their own

country. They have a few cattle, and they sow a little, and plunder the caravans travelling on the Maimani road, or make inroads on the scattered tents of the Jamshidi.

Jamshidi are the only tribe of E. Iranians who are exclusively nomades. They derive their descent from Jamshid, and moved out of Segestan to the shores of the Murghab, which they have occupied from pre-historic times. They live in the neighbourhood of the Salor and Sarik Turkoman, and they use the round conical tent of the Tartars, surrounding it with felt and a reed matting; and their clothing and food are Turkoman, as also is their occupation, for they are great man-stealers. They excel the other Ainak as horsemen, and for a chapao, band themselves with men of Herat or with the tribes of Turkomans. It was this cause that led Allah Kuli Khan to transport them from Khiva to the banks of the Oxus, after he had conquered them with the allied Sarik Turkoman. After a residence of 12 years, they fled, and returned to the town of Murghab. The *Jamshidi* are polite in word and manner. They still retain parts of the Zoroastrian faith, reverence fire, and pitch their tent door to the east.

The *Tajak* is Iranian. He is met with in largest number in the khanate of Bokhara and in Badakhshan, but many have settled in the towns of Khokand, Khiva, Chinese Tartary, and Afghanistan. The *Tajak* is of a good middle height, has a broad, powerful frame of bones, and especially wide shoulder bones; but they diverge from the Iranian; they have the Turanian wider forehead, thick cheeks, thick nose, and large mouth. The *Tajak* originally came from the sources of the Oxus in the steppe of Pamir. The term is from *Taj*, a crown, the fire-worshipper's head-dress. But the *Tajak* does not so style himself, and regards the term as derogatory. The *Tajak* is covetous, unwarlike, and given to agriculture and trade; fond of literary pursuits, and polished; and it is owing to their preponderance in Bokhara that that city was raised to the position of the headquarters of Central Asiatic civilisation, for there, from pre-Islamic times, they had continued their previous exertions in mental culture, and, notwithstanding the oppressions which they have sustained from a foreign power, have civilised their conquerors. Most of the celebrities in the field of religious knowledge and belles-lettres have been *Tajaks*, and at the present day the most conspicuous of the Mullah and Ishan are *Tajaks*, and the chief men of the Bokhara and Khiva court are *Tajak*, or, as the Turks style the race, *Sart*. Vambery considers the *Tajak* and *Sart* identical, but he recognises that in their physiognomic peculiarities, the *Sart* differs greatly from the *Tajak*, being more slender, with a larger face, and a higher forehead; but these changes he attributes to frequent intermarriages between *Sart* men and Persian slaves.

In Central Asia, the warrior, the shepherd, the priest, and the laymen, youth and old age, equally affect poetry and reciting of tales. The literature of the Muhammadans or settled nations brought from the S. is filled with exotic metaphor and illustration. In the three khanates, the Mullahs and Ishans have written much on religious subjects, but its mystical allusions are beyond the reach of the people. The Uzbak, the Turkoman, and Kirghiz esteem music as their highest pleasure,

and often break out in song, singing soft minor airs. The Uzbak poetry on religious subjects is exotic, derived from Persian or Arabic sources. The Tartar compositions are tales, and relate to heroic deeds, similar to the romances of Europe.

Mr. Farrar (p. 70) gives B.C. 2000 as the period of the Aryans leaving their common home, but in this he differs greatly from Chevalier Bunsen and other authorities. The E. Iranian race came down the valley of Indus and into India, and Central Hindustan or Central India became the *Madhyadesa* of the ancient Aryans—the middle region or *Aryavarta*, the Arya country; and a slokam in the Sanskrit work, the *Amara Kosha*, defines its ancient boundaries thus:

‘Ariavartaha punia bhumi hi,
Mad'hiam Vindhya Himava yoho;’

i.e. the Aryan country, the sacred land (lies) between the Vindhya and Himalaya; in this way indicating both the ruling race and the boundaries of the country held by them at the time that *Amara Sinha* wrote the *Amara Kosha*.

There would seem to have been two migrations into India of the Aryans, viz. the Earlier Aryans, the ancestors of the most ancient Hindus, a people acute, literary, skilled in arts, but not very warlike, and rather aristocratic than democratic in their institutions. The Later Aryans, a warlike people, probably once Scythians, democratic in their institutions, and rather energetic than refined and literary. The Aryans of India have caste and marriage laws, with strict rules of inheritance resulting from their sacred form of marriage, and subject to none of the caprices of Muhammadan and similar laws. Aryan is the private property in land, as distinguished from the tribal; the property first of the village, then of the family, then of the individual, and a consequence is the attachment of the Aryan to his native soil. Especially Aryan is the form of what we call constitutional, as opposed to patriarchal and arbitrary, government. The Indian village or commune is a constitutional government, common to all the Aryans; but there are two great classes of Indian Aryans, one with aristocratic communes, and one with democratic, and recognising as equal all free citizens, to the exclusion of helots only. Among the non-Aryans the rule of the chiefs seems to be patriarchal and arbitrary. Property in the soil is tribal rather than individual. There is little local attachment to the soil.—*Vambery's Sketches of Central Asia*; *Bunsen, Egypt's Place in Universal History*; *Reverend Mr. Farrar*; *Dr. Pritchard, in the Report of the British Association*. See Aryan; India.

IRAVAN or Ilavan. MALEALAM. A caste whose occupation is the extraction of palm wine or tari from palm trees.

IRAVATI, the same with the river Hydrates or Ravi.—*As. Res.* ix. p. 53.

IIAWADI, the principal river of Burma and Pegu, rises in the S. slopes of the Patkoi mountains,—one branch in lat. 27° 43' N., long. 97° 25' E., and another in the same hills a few days' journey farther eastward. These two, known as the Myit-gyi or large river, and the Myit-nge or small river, respectively, unite to form the Irawadi in about lat. 26° N. The springs are reported to be fed by large snow beds and a few glaciers. In March the river begins to rise, and gradually increases its volume till its waters are forty feet

above their lowest level. They rapidly subside in October, when the rains cease and the N.E. monsoon begins.

It runs nearly N. to S. through Burma and Pegu, and discharges itself by nine different mouths into the Bay of Bengal, after a course of 1060 miles. It receives the Khyendwen, 470 miles; Shwely, 180 miles; and the Moo, 125 miles; and it drains 164,000 square miles. The chief tributaries of the Irawadi, in British territory, are the Ma-htun (or Meng-dun), the Ma-de, and Thai-lai-dan from the W.; and the Kyeni, Bhwatlay, and Na-weng from the E. Its tide is felt as far up as Henzada, and at Puzwondoung it rises $18\frac{1}{2}$ feet at springs. The Bassein branch affords a passage for the largest ships for 60 miles from its mouth. No river of similar magnitude presents so few obstructions to navigation. Amongst the high mountains at its source the rainfall is considerable; at its centre, the fall of rain is comparatively small, but much rain falls at its delta. From the entrance of the Nam Yang downwards, the valley of the Nam Keng is generally very flat, and of some considerable width, and numerous marshy tracts appear on either side of the river. The average length of the Nam Kang, from the mouth of the Nam Yang down to its junction with the Irawadi at Katikyo Nainmo, including the numerous curves, amounts to 52 miles. From the entrance of the Nam Keng to Amarapura, the river has a real length of 269 miles; from Amarapura to the head of the delta at Sakkemun, 370 miles. The delta forms a triangle, nearly equilateral, with sides of 160 miles, the enclosed area consequently amounting to 9742 square miles. Towards Pegu and Sitan the Irawadi widens considerably, in consequence of the accession of the Pan-lan river, and its limits become less sharply defined. The valley of Hukum is stated to be 1000 feet above the level of the sea. The central branch of the Irawadi, at Manchi, in lat. $27^{\circ} 20' N.$, where it was visited by Wilcox, has an elevation of 1800 feet, and runs over a pebbly bed. Its elevation at Bhamo, in lat. 24° , is estimated by the same authority to be about 500 feet. The valley of Manipur is drained by the most westerly tributary of the Irawadi, and it is separated from Cachar by a mountain range, which is 6000 or 8000 feet high, and is pine-clad towards the summit. The valley of Hukum or Hookoom was visited by Griffith; it is more open, but is surrounded on the N. and E. by mountains elevated 5000 and 6000 feet, and is traversed by numerous ranges of low hills. Griffith's own account of the Irawadi above Bhamo is, that it keeps up its magnificent character, as far as he went, to the mouth of the Mogoung river, where it is 900 to 1000 yards across, and he describes the appearance of its vast sheet of water as really grand. At the beginning of the first defile, about five miles above Bhamo, the river is about 1000 yards across, and its course is defined by low-wooded hills which run close to its banks. About two miles farther on, the channel narrows to 500 yards, and the hills become even closer and hang more abruptly over the stream than before, and about another mile beyond, a higher range of hills from the S.W. comes in behind the former one, and both terminate on the bank as two headlands. Upon the right bank of the Irawadi, the mountains opposite Than Yun Yova, in lat. $24^{\circ} 56\frac{1}{2}' N.$,

long. $96^{\circ} 31\frac{1}{2}' E.$, have an average height of from 6000 to 7000 feet. One of the highest, the summit of which is visible from the valley, reaches apparently 8000 feet. Westward of Let-pan Zin Yova, at a little distance from the right bank, lat. $24^{\circ} 27' 2'' N.$, long. $95^{\circ} 56' 15'' E.$, the summits of the mountains attain a height of 2000 feet. Heights of 800 and even 1000 feet are also numerous on the right bank of the river, only 20 to 23 miles N. of Shue-mut-thophya, lat. $23^{\circ} 4' N.$, long. $96^{\circ} 15' E.$

The character of the whole river district, including the elevations not above from 3000 to 4000 feet, presents a thoroughly tropical appearance. The declivities of the hills, as well as the valley of the river, are covered with the wildest and most diversified vegetation, in the shape of dense tree and grass jungles.

The bore in this river is occasionally severe, but in the neighbouring Sitang river its fury is great, and occasions much loss of life. Burmans name thirty feet as the height to which it occasionally rises, and this may perhaps be the case in the bends of the river, where the rush has attained its full speed, before being deflected to the next bend. Even in the Hoogly, near the bend at Chandpal Ghat, the pointed curling wave may be seen several feet high. In the Irawadi and Mekong basins, there are remnants of tribes strongly distinguished from the predominant races, and tending, with the evidence of language, to show that the ethnic history of Ultra-India is very ancient, and has undergone repeated revolutions.

Its delta extends for 130 miles from Porian point to Rangoon river. Through its delta run nine principal branches, the names of which are, the Bassein or Negrais, the Thek-ngay-thoung, the Kyun-tun, the Peah-ma-lau, the Irawadi, the Dallah, the Pyapun, the China Buckeer or Tdoo, and the Rangoon rivers. Their mouths are fronted by extensive shoals, formed from the detritus brought down by the rivers. The amount of water which the Irawadi pours into the sea is about two-thirds that of the Ganges.

In the delta there is a maritime vegetation of mangroves, *Sonneratia*, *Heritiera*, *Excoecaria*, and other saline plants, just as in similar salt-marshes along the coast of the tropics. Irawadi is derived from Airavati, the elephant of Indra.—*Schlagentweit, General Hypsometry of India*, ii. p. 101; *Oldham in Yule's Embassy*; *Hooker and Thomson's Flora Indica*.

IRAWARA, in Mysore, the total produce, before division under the 'batai' tenure.

IRDHI, amongst the Buddhists of Ceylon, a state embracing ten supernatural powers.—*Hardy*.

IRIACEÆ, the Iridaceæ of Lindley, the iris tribe of plants. They are chiefly herbs, and are more remarkable for their beautiful fugitive flowers than for their utility. This order, however, contains the saffron (*Crocus sativus*) and the iris, more than one species of which affords the orris root of commerce. I. *Florentina*, Linn., grows around the Mediterranean Sea, and is one species furnishing the orris root of commerce. Many species are grown in Indian gardens. The rhizomes of the Tsch-lan of Hunan in China, and of other species, are eaten or added to the infused tea-leaves to flavour it.—*Rozb.* See Iria.

IRIARTEA, a genus of palms peculiar to the forests of S. America, and might be introduced

IRIS FLORENTINA.

into India with advantage. *I. Exorrhiza*, Mart., the Pashiuba or Pasciuba of Brazil, produces an edible fruit. *Iriarten setigera*, Mart., is fabricated into blow-pipes. *I. Anticola*, sp., is the wax-palm of the Andes and Brazil. Its former name was Caroxylon. See Palms.

IRIS FLORENTINA. Linn. Florentine iris. Sosan, . . . ARAB., HEB. | Peh-chi, . . . CHIN. Shoti of . . . BEAS. | Orris root, . . . ENG.

A native of Italy and Asia Minor, furnishes the orris root of European shops. It is a favourite ingredient in hair and tooth powder. Excellent orris root is procurable in the bazars under the name of Bekh-banafsha or violet root, but Royle under this head very confidently refers the putchuk of commerce to this article. A species of iris is cultivated in India, and its roots are used in the same manner as those of the Florentine kind. A broadish-leaved species occurs at various places throughout the Panjab Himalaya from 2500 to 9500 feet. Mr. Powell says the *Iris Florentina* is entirely distinct from the Kashmir variety, which luxuriates over every grave, and blooms on many a house-top in the far-famed valley, a custom resembling that of the ancient Greeks, who venerated the iris as the messenger between God and man.—*Powell; Winter; O'Sh; Stewart.*

IRISH MOSS, or Carrageen moss, is the *Chondrus crispus*, Lngb., and *C. mammillosus*, Grev., of the W. of Ireland. It is used for cattle-feeding and for dietetic purposes.

IRON. W. of Armenia, on the borders of the Caspian Sea, we find the ancient name of Albania. The Armenians call the Albanians Aghovan, and as gh in Armenian stands for r or l, it has been conjectured by Boie that in Aghovan also the name of Arya is contained. This seems doubtful. But in the valleys of the Caucasus we meet with an Aryan race speaking an Aryan language, the Os of Ossethi, and they call themselves Iron.—*Muller's Lectures*, p. 230. See Elburz; Hindu.

IRON.

Mars of the Alchemists.	Ferrum, . . .	LAT.
Hedeed, . . .	Basi, Besi, . . .	MALAY.
Than, . . .	Ahan, . . .	PERS.
Tieh, Tec, . . .	Zelazo, . . .	POL.
Jern, . . .	Aos-panah, . . .	PUSHT.
Yzer, Jizer, . . .	Scheleso, . . .	RUB.
Fer, . . .	Ayas, Hyam, . . .	SANSK.
Eisen, . . .	Yakada, . . .	SINGH.
Ais, . . .	Hierro, . . .	SP.
Sideros, . . .	Imbu, . . .	TAM.
Loha, . . .	Inumu, . . .	TEL.
Ferro, . . .	Deymir, Timur, . . .	TURK.

Iron when found native is supposed to be generally of meteoric origin, but extensively in combination with oxygen or sulphur, as a salt of various acids, as carbonate, sulphate, etc., mixed with earths or other metals.

The iron of commerce is extracted from iron ores. Some of the oxides, as magnetic and specular iron-ore, are heated only with charcoal, as in Sweden, Russia, and the E. Indies, when the carbon combining with the oxygen the iron is set free and melted. The carbonate, iron pyrites, clay iron-ore, red and brown hæmatites, and spathose iron, are first roasted, and then exposed to a fierce heat in contact with charcoal, coke, or small coal, and a flux, either lime or clay, according as the ore is argillaceous or calcareous. These earthy matters become vitrified, and form a slag at the surface, while the heavy particles of iron,

IRON.

falling down, run out by a hole at the bottom into moulds, and form pig or cast iron. This is still impure, from the presence of charcoal, sulphur, and portions of silicon and aluminum. It is again twice fused in the refining and puddling furnaces, and exposed to the influence of a current of air at a high temperature, when the whole of the charcoal and sulphur are burnt out, and the other impurities form a slag at the surface. The metal is taken out, beaten or pressed, and then drawn into bars, which form the malleable or wrought iron of commerce.

Iron has long been known in India. From a passage in Kalidasa's drama of the Hero and the Nymph (p. 218), it is clear that the art of welding it was known to the early Hindus.

'You tell me, gentle Nymph, your fair friend pines
With amorous passion. But you do not see
The ardour that consumes this heart for her.
Alike our glowing flame. Then quickly aid
Our union to cement, as close combines
Iron with iron, when each fiery bar
With equal radiance glows.'

The iron-smelters of India are low caste, and humble, poor people. They have small clay furnaces, with charcoal for fuel, and the blast is caused by foot or hand bellows of sheep or goat skins, or even of leaves. The smelting process lasts from 6 to 10 hours, but at 3 or 4 separate charges, at the end of which time from 10 to 20 lbs. weight of iron is produced.

Iron-ores abound in almost every district of India, and the prevailing ore is the oxydulous iron, often magnetic, and with polarity; but specular iron-ore, hæmatite, clay iron-ore, and sulphuret of iron also occur abundantly. Many of the ores are noted for their singular purity, especially the magnetic oxides. Some are distinctly titaniferous, being in this respect similar to the Taranaki iron-sand of New Zealand. But the bulk of the ores of Beypur, Salem, Palamcottah, Penatur, Puducottah, are rich magnetic oxides, and when freed from earthy matter, and ready for the blast furnace, contain about 72 per cent. of iron. They are found in mountain masses, and are obtained by quarrying with a crowbar. They are quite free from sulphur, arsenic, and phosphorus, and upon a large average have been found to yield 68 per cent. of metal in the blast furnace. The Punnpara and Honore ores were used for the production of steel by the Bessemer process.

The plan adopted for the production of Indian cast-steel at the Beypur works, by the Bessemer process, was similar to that pursued in Sweden, but differed essentially from the Sheffield method. At Sheffield and elsewhere in Great Britain, where the process was in operation, pig-iron was melted in a reverberatory furnace, and run thence into the converter or Bessemer vessel, which was mounted on axles. But in Sweden, and at the Beypur works in Madras, the crude metal was run direct from the blast furnace into an ordinary founder's ladle, raised to a sufficient height by means of a travelling crane, and then poured into the converter, which is a fixed vessel, lined with a mixture of native fireclay and sand and pulverized English firebrick. Steam was raised to about 50 lbs. in the boilers, giving a pressure of blast of about 6½ or 7 lbs. per square inch, and the air was driven into the converter through 11 tuyeres of ½ inch diameter, placed horizontally at the bottom of the vessel. No manganese or other metal was added

to temper the steel, the quality of the metal required being regulated by the pressure of blast and the time of blowing. As soon as the metal was sufficiently decarbonized, the vessel was tapped, and the fluid steel run into a ladle provided with an outlet in the bottom. This ladle was swung round over the cast-iron ingot moulds, the fireclay plug withdrawn, and the steel allowed to flow in a clear stream into the moulds beneath. These ingots were then clogged down under a Nasmyth hammer, and drawn into finished steel bars of various sizes.

The iron-ore of the *Salem* districts of the Madras Presidency is a rich magnetic oxide, very heavy and massive. The yield averages 60 per cent. of metallic iron. Much of the ore being a pure black magnetic oxide, would doubtless yield 73 per cent. The ore is, however, often mixed with quartz, which is a very refractory material in the blast furnace. Limestone, and in some places shell-lime, is employed as a flux; and the charcoal of some kind of acacia is the fuel. It occurs there in immense beds 50 to 100 feet thick, and its outcrop can be traced for miles. On one hill six miles from Salem are five bands of magnetic iron-ore from 20 to 50 feet thick.

Magnetic iron-ore of fine quality occurs in Coimbatore, Cuddapah, and Vellore; magnetic hematites and magnetic iron-sand also in Cuddapah, in the North Arcot district, in the Vellore taluk, at the villages of Pankam, Pulleputt, Anchenamput, Vannanthangal, Vennembutt, Catharercoopum, Vaniembaddy, Satghar, and Strevelliputtur; and magnetic iron-ores occur in the Bellary, Masulipatam, and Mysore districts. Manganese was detected in the iron-ores of Hyderabad, Kurnool, Bellary, the Baba-Booden hills, Mysore, and Vizianagram. Ores of Hyderabad are magnetic. In the Salem district two varieties of iron are obtained, one remarkable for its softness and malleability, the other for its steel-like hardness, which adapts it for the formation of edge-tools, cold chisels, etc. The following names are given to this metal in process of adaptation to its finished manufacture:—Culties or blooms of iron, Palms or bars of iron, Vuttoms or pieces of cast-steel as it comes from the clay crucibles, Oolies or bars drawn out from the clay crucibles, iron beads which ooze out from the blooms in the blast furnace. Bloom iron from Palghat is readily malleable, and furnishes a hard steel-like iron. It is necessary to subject the bloom to a second fusion and much hammering before they can bring it to the state of the soft malleable iron in which it is met with as an article of commerce.

The iron-ores of Coimbatore are of very fine quality, particularly rich in the metal, and highly magnetic.

Dr. Heyne, describing the manufacture of iron in the Karnatic to the south of the Pennar river, says, when first smelted, it is extremely brittle, requiring several operations to bring it into a malleable state. There are two varieties of ore used in the district in which he observed the processes. The one, an iron-sand, collected in the beds of rivers, consists of the protoxide, mixed with much of the peroxide; the other, a red schist, is almost entirely composed of red oxide, but in the centre of the mass it affects the magnet.

The woods used in Southern India for making

charcoal for the iron works at Beypur were the vella-marda, karra-marda, Indian-gooseberry, Poohum, nux vomica, and cassia.

Iron-glance of the hills of Cupputral, in the *Ceded Districts*, furnishes an excellent malleable iron. Specular iron-ore occurs in the Sandur hills, about 30 miles W. from Bellary.

The *Bellary* district yields a variety of iron-ores, some of them very rich in the metal, and several of them are associated with manganese. The prevailing ores of iron of this district are the black and grey ores alternating with sandstone, liver-coloured ore (which has been repeatedly sent to Madras as copper-ore), and red jaspersy clay iron-stones. They are also associated in the same district, and in the vicinity of Kurnool and Ghooty, with magnesian limestone, grits, conglomerates, aluminous shale, fireclay, and black dolomite.

The principal ores of the *Cuddapah* district are red, brown, and purple in colour, which yield iron of excellent quality and very malleable. Some of the magnetic iron-ores of the same district are particularly rich in iron, and a few of them contain traces of manganese. Of those from Chemur and Pulevendalah, the latter is magnetic, although earthy and dull red in the fracture, and bright red in the streak. The steel-grey and granular iron-ores of Chitwail, Camalapur, and Gurumcondah are all rich in the metal, and more or less magnetic. The yellow ochre and rusty ores of the Muddenpully taluk are said to yield good malleable iron. The steel-grey iron-sand Comarole and Yandapully in the Doopaud taluk are highly magnetic, and contain a little manganese. The micaceous iron-ore and iron-glance of the Doopaud taluk are also rich in the metal.

Gunnysgill hill ridge, south of *Kurnool*, is seamed with great veins of very pure specular iron-ore. A great cone-like mass of almost pure specular iron-ore rises out of the base of the northern slopes. Then S.E. of Ramulkota there is a ridge a 'perfect mine of iron;' but the great local drawback is the scarcity of fuel, of which only a small supply is obtainable from the low and thin jungle in the hilly regions to the southwards. Smelting is carried on at Ramulkota. The ore which is brought from an adjacent hill is massive, roughly granular, coarsely crystallized, and very brilliant. Usually the iron-ore is smelted once in a month, during 24 hours. The furnace is charged seven times during this day and night; when seven lumps of smelted metal are obtained. The furnace is charged first (a fire being at the bottom) with powdered charcoal. Two large baskets (six or seven large Madras measures) of charcoal are thrown on the fire; then a small basket of powdered ore (74 seers) and six small baskets of charcoal, that is, about a handful of iron and a handful of charcoal alternately, at about an interval of a minute. Nothing else is put in the furnace. The bellows are kept at work for about two or three hours. Then the soft mass of metal is raked out, beaten for a short time with heavy hammers until it assumes the rounded wedge-shaped form usually given to the lump of iron at native furnaces, a deep cut being made in the mass. This lump of metal is about three-quarters of the weight of powdered ore placed in the furnace, and it is worth three rupees. Afterwards it is reduced to bars of workable iron, by being heated four times in the

forge, and beaten between each heating. The furnace is a small dome-shaped edifice, almost exactly like the furnaces of the Salem district, both in shape and size.

Numerous iron villages and hamlets are found along the western flanks of the *Nullamallays*, and several of these furnaces are always at work, the metal being in demand for ploughshares and other agricultural implements, though not for tires of wheels, for which it is found unsuitable. Besides Nerjee stone, the district abounds in serpentine.

Iron-ore, hard and compact, of a light bluish colour, and of excellent quality, occurs in great abundance at *Timmericottah*; brown iron-ore near the *Guticondah*; iron-ore in crystals and parallelipeds on the surface of rising ground about three miles from Gurjal.

From the neighbourhood of Bomalapur, six or eight miles north of Dorenal in the *Guntur* district, and all the way to Gompedala near Doopaud for seven or eight miles, the ground is nearly all iron-sand. It is washed and smelted at Ramapoliham near Dorenal.

The most prevalent iron-ores of the *Hyderabad* territories seem to be the rusty brown, red, and yellow ochres; iron or steel sands with manganese, and specular or glance ores,—none of the latter, however, are magnetic. The black, brown, and red cellular iron-ores are abundant. Red hæmatite is found in the iron clay near Kondapur, and is used in the manufacture of the *Wootz* steel.

The magnetic iron-ore employed for ages in the manufacture of the damask steel used by the Persians for sword-blades, is obtained from schist near *Kona-Samudram* around Deemdoortee, where the ore is extensively distributed. The minute scales of iron are diffused in a sandstone-looking gneiss or micaceous schist, passing by insensible degrees into hornblende slate, and sometimes containing amorphous masses of quartz. The strata are much broken up and elevated, so that the dip and direction are in no two places the same, and bear no relation to the mountains in the north. The iron has the remarkable property of being obtained at once in a perfectly tough and malleable state, requiring none of the complicated processes to which British iron must be subjected previous to its being brought into that state. Mr. Wilkinson found it to be extremely good and tough, and considered it superior to any English iron, and even to the best descriptions of Swedish. The Persian merchants, who frequented the iron furnaces of *Kona-Samudram*, are aware of the superiority of this iron, and informed Dr. Voysey that in Persia they had in vain endeavoured to imitate the steel formed from it.

Ores, powerfully affecting the magnet, exist in great quantity at Taygur, a village of the *Konkan*.

The iron-ore of *Rewa Kanta* was in former times abundantly worked in the Zillahs of Narukot, Palampur, Simudra, and Bhilod.

The Azuria mines in *Jubbulpur* are situated on a hill consisting of iron-ore found at 1½ feet from the surface, and extending over an area of about 60,000 yards square and 30 feet deep. The ore exists in thin flakes of a grey-iron colour and metallic lustre. The ore and charcoal are thrown in small quantities every half-hour into an earthen furnace 5 feet high and 3 feet diameter. A part of the bottom of the furnace is filled with fuel

only; this being kindled, a pair of bellows is applied to raise the heat, and a passage made at the side of the furnace for the melted metal to run out. Four maunds (320 lbs.) of ore and 2½ maunds of charcoal are daily used in a furnace; the fuel is used in the proportion of 5-8ths or 62 per cent. of the ore for smelting, and 1-5th more for refining the metal. A furnace furnishes daily 2 maunds (160 lbs.) or 50 per cent. of the crude iron from 4 maunds of the ore; this, when forged, yields 30 seers, or nearly 19 per cent. of wrought-iron. The entire cost of the pure metal obtained amounts to Rs. 1·13 per maund, including labour and materials.

Iron-ore, in the form of silicious peroxide, occurs at Tendukhera, Narsingpur. The ore actually worked is a large vein or lode in the limestone of the great schist formation, and the only rock in its immediate vicinity is hard grey and blue crystalline limestone. It occurs to the north of the *Nerbadda*, in the open flat country between the river and the *Vindhya Hills*, and at one or two other places in the neighbourhood, also at Mohpani, not far from Tendukhera. The iron is smelted in small clay furnaces, blown by goat-skin bellows, worked by the hand. It is obtained in small lumps or blooms called cutcha or raw iron, and is afterwards reheated and hammered, and then sold as pukka or finished iron. Intermixed with the raw iron as it comes from the furnace, is a sort of crude steel, which is carefully selected and used for the manufacture of tools and agricultural implements. The ore is largely smelted at Tendukhera, about two miles from the mines, where, during the eight dry months of the year, about sixty furnaces are worked. About 5 tons 3 cwt. of iron-ore and 5 tons 12 cwt. of charcoal are used for the manufacture of two tons of pukka or finished iron. The ore contains, upon an average, about 40 per cent. of iron; it is very fusible. The ore is obtained by means of pits sunk from 30 to 40 feet, through the alluvium of the valley, to the ore. They are washed in during the rains, and require to be resunk yearly. The pukka iron sells at from 5 to 6 rupees (10 shillings) per goan or bullock-load of 3 maunds, equal to 24 bundles, or from £4, 10s. to £5, 8s. per ton. From the iron of these mines, about 1840, a very good suspension bridge was built near Saugor.

At *Lohara* (*Loha*, HIND., iron), in the *Chanda* district of the Central Provinces, there are two localities, five miles apart, where hæmatite abounds. At the eastern one there is a mass of dense red hæmatite, forming an isolated hill 120 feet above the level of the surrounding country, which would probably yield 300,000 to 500,000 tons of iron without going below the surface. The other mass is smaller in extent.

Iron-ore, in the form of magnetite or granulated, is found lying on the surface of almost all the high grounds in *Chittia Nagpur*.

In *Bundelkhand* and in the *Nerbadda* valley are large quantities of hæmatite.

An iron-ore called *Dhaoo* is produced in the land lying between Mouzah Sathu Nurwari of the *Gwalior* district and *Punehar*, also in the hills adjoining. The ore is taken to *Dhoa* and *Bugrowlee* and other places, where it is smelted. The iron-ores of *Gwalior* are remarkable for their purity and richness. They are chiefly red iron-ores and mag-

netite, containing sometimes manganese, but there are also brown iron-ores and silicious hæmatite. The magnetites contain 70 per cent. of metallic iron, the red iron-ore from 60 to 71 per cent. of iron, the brown iron-ores from 42 to 54 per cent., and the silicious hæmatites from 45 to 48 per cent. of metallic iron. Of sulphur there are but few traces, and of phosphorus none. The red iron-ores near Suntoro, Maesora, and Dharoli occur in enormous quantities on the surface of the ground. These ores, it is stated, are especially serviceable for the production of Bessemer cast-steel for rails. There is a large forest in the immediate N.W., which may be calculated to yield 56,000,000 tons of wood, and which, it is estimated, would feed an iron work producing daily twelve tons of finished iron during 900 years.

Abundance of iron-ore is found in the district of *Sumbulpore*, and it is plentiful in the Cuttack tributary states of Talcher, Dhenkanal, Pal-Lohara, and Ungool, and, indeed, throughout the hilly country bordering the settled districts of this province on the N.W. In Sumbulpore the broken iron-ore is mixed with charcoal, and put into the furnace, about 4 feet high, and made of clay. The fire is maintained by a blast, introduced through a fireclay pipe, which is sealed up with clay after the insertion of the nozzle of the bellows. The slag is raked out, through an aperture made in the ground, and which runs up into the centre of the furnace base. Three men—one to serve the fire, and two to work the bellows—are required to tend each furnace. Talcher and Dhenkanal ores are said to produce very excellent metal, without the aid of a flux. The charcoal used is made from the sal or *Vatica robusta*. The price of the crude iron in Ungool is a trifle less than one anna per seer.

In *S. Mirzapore*, Palamow, Singrowlee, and Rewa the ores yield 70 to 75 per cent. of pig-iron. Each furnace is kept in full play all day. Each day, if the smelters have wives and children to break up the ore into $\frac{1}{2}$ or $\frac{1}{4}$ -inch cubes, and bring charcoal, they will charge the furnace four times, and the day's work will be 4 or 5 small malleable pigs of 2 or 2½ seers each, or in all 12 annas to a rupee's worth of iron. They employ no flux. The furnace is emptied at each charge. The metal never runs liquid from the furnace, but falls to the bottom, below the blast tube, from whence it is taken in a flaming mass by a pair of iron tongs, and while incandescent it is hammered on a hard stone or rough iron anvil into a double wedge-shaped pig, the labour being divided between the smelter and his family.

The fuel employed in the *Uthar* district in smelting the ore, is charcoal obtained from the dhak tree (*Butea frondosa*), and costs about 1 rupee for 6 maunds. To smelt 16 maunds of ore, 24 maunds of charcoal are required, and this will yield 4 maunds of iron, valued at 3 rupees per maund.

The part of the *Vindhya* Hills forming the southern portions of Shahabad, and of Mirzapore, N. and N.W. of the Sone river, together with Mirzapore, south of the Sonc, Rewa, Palamow, and, in fact, the whole chain and spurs of the Vindhya range in this neighbourhood, is full of mineral wealth of various kinds. Quarries of the peroxide and proto-peroxide of iron, as also of iron pyrites, abound in the most accessible portions of the Kymore range. The Kymore range

is the north-easterly spur of the Vindhya range, and fills all Southern Mirzapore and Shahabad. Some of the ores yield 70 to 75 per cent. of pig-iron. Some of the best iron in India is produced in Palamow, Rewa, Bidjuggur, and Singrowlee. The iron from the latter place in particular bears a high character in the market, being tough, flexible, and easily worked.

In *Bengal*, about 6 miles N.E. of the town on the road to Bugodhur, a place on the Grand Trunk Road, is the Silwar Hill, which almost deserves to be called an iron mountain. It stands at the bed of a valley, through which runs the Kunbur river, all along the course of which stream good iron-ore is found in large quantities. About 5 or 6 miles north of Hazaribagh, on the Burbi road, is Sedgua, and here, close to the road, is coal of a very good quality. Iron-ore has been traced in the Kunbur valley for a distance of nearly 30 miles, and the ore is said to have yielded 75 per cent. of the finest metal. So plentiful is the ore, that the Kol and Santal, who work it to procure the material for making kodalies, hatchets, etc., for exportation to the neighbouring districts, never do more than dig a hole to the depth of two, or it may be three feet. Coal, although found near the station, can be procured in any quantity from the banks of the Damuda, and wood can be drawn from the forests and jungles of the Ramgurbh plateau.

Hazaribagh iron-ore appears to be of the finest quality, and contains not less than 80 per cent. of pure metal. It also contains a slight admixture of manganese, which would be very useful as a flux where the finest steel, such as would be required for guns, is manufactured. There is a surface of 500 square miles of this ore in the Damuda coal-fields, extending from ten miles south of Hazaribagh on to Turi, and underneath this rich deposit is a layer, supposed to be about 20 feet in extent, of the finest coal in India.

The Agaria, Kol, Santal, and other jungle races smelt with charcoal only, and make no use of the enormous deposits of coal; their out-turn perhaps amounting to about a maund in a couple of days. A very large quantity of iron of a very fine description is found near Chuttra, one of the principal towns in the Hazaribagh district. Coal is often found within 5 or 6 miles of this place, viz. in the Mahanadi river.

The iron-ores of the *Panjab* are produced along its N.E. mountain frontier, as well as in the lower hills of the Sulimani and Waziri ranges, and those to the S.E. of the Bunnu district, and to some extent in the Salt Range on the other side of the province, in the hilly portion of Gurgaon district, and in the districts of Simla, Kangra, Dehra Ismail Khan, and Hazara in the Delhi district.

The Mahruli Hill, which yields iron-ore, is one of that group of outliers that forms a continuation as it were of the *Aravalli* range.

Along the Himalaya frontier, the principal places of production are the Hill States of the Simla district, Jubal, Dhami, Bashahr, and Rampur. At Suket, Chamba, and Mandi, iron is largely produced, and the mines at Shil, Kot Khai, Futehpur, and Bhir Bangal of Kangra are famous. Mines are worked along the whole range, both on the north and south faces, from the Sutlej to the Ravi. Under the Sikh rule, this iron was extensively used for gun-barrels.

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At Kanigorum, in the Waziri Hills, it is found also as a hæmatite in several parts of the Salt Range, and in the Chichalli range, on the other side of the river. The cutlery of Nizamabad and Gujerat is, however, exclusively manufactured with imported steel.

The Kamaon ores are from an argillaceous band containing large quantities of red hæmatite, the ore-bed being 10 to 20 feet thick, and extending for a long distance. The surface deposits supply the greater proportion of ores used by the smelters, but much labour is necessary in the collection.

Magnetic iron-ore is found in considerable quantity about 30 miles N.E. of Dharmasala, Kangra district, close to the sanatorium of Dalhousie. Of the ores of the Chamba Hills, and in the divisions up to the Hazara district included in the Kashmir territories, the best is found at Reyasi in Jammu; the ore found at Sonf and Kutyar, in Kashmir proper, is not so good.

In the hills due north of Peshawur is the source of the fine Bajaur iron which is used in the manufacture of the gun-barrels of Kohat and Jammu, and in the formation of steel for the blades of Bokhara and Peshawur.

At Sikhbar, in the Darjiling district, is a valuable magnetic iron-ore.

Iron is obtained from the ore found in Shoru Cacharri Mebaul, in Gholagat Sub-division, in Assam, about 15 or 18 feet under the surface of the ground.

In Pegu, ore is found in the slope of a mountain called Popah, about 3000 feet in height, 15 miles inland from the river Irawadi, on its left bank. The ore is found in large quantity in nodules, and is collected and smelted by the inhabitants of the neighbouring villages. They use no flux of any description in smelting. Price 4 rupees per ton, delivered at the neighbouring furnaces.

IRON.

There is a large variety of ores of iron in the Tenasserim Provinces, some of which are uncommonly rich in metal.

Iron-ore abounds in the Shan states, and to the south of Mandalay in the district of Pagang. To the west of Sagaing, for miles up the Irawadi river, the ore abounds, a rich hæmatite. Tiu is found in the Shan States to the south of Mandalay.

Many of the provinces of China yield an excellent iron, equal to the Swedish metal, from red hæmatite; limonite, black magnetic iron-ore, and specular iron-ore occur, but the trade in Chinese iron is petty.

Europeans, in private companies, under Government patronage, and also by Government departments, have made several unsuccessful attempts to establish iron works of the form adopted in Great Britain. The chief of these have been the attempts at Beypur and Porto Novo in 1833 and 1859, in 1874 in the Madras Presidency, with a complete loss to the shareholders; at Dechauri in the N.W. Provinces, and in Bengal. In 1855 the iron works at Dechauri, in the N.W. Provinces, possessed a well-constructed high furnace; forest for the supply of charcoal was growing all round them; they had fair, brown iron-ore at hand, and excellent rich hæmatite and magnetic ores only 25 miles off, but the work was abandoned. In 1882, the Government of India took the Bengal iron-works off the proprietors' hands, paying the shareholders Rs. 4,30,761. Surgeon-General Balfour, in 1855, reported on the iron-ores of the south of India, and showed that in the competition, to be successful, Indian iron must vie with the iron of Sweden and Russia, and that it is the convenient forms of hoop, and bar, and pig—forms in which wrought-iron is imported—which give British the preference.

Iron imported into India—

	Cast or Pig.		Wrought.		Total.	
	Cwt.	Value, Rs.	Cwt.	Value, Rs.	Cwt.	Value, Rs.
1874-75,	52,262	1,15,457	1,482,604	1,23,13,095	1,534,866	1,24,73,485
1875-76,	85,972	2,48,175	1,918,860	1,38,93,520	2,023,846	1,42,45,978
1876-77,	49,030	1,29,286	2,156,758	1,50,07,751	2,251,743	1,52,90,473
1877-78,	127,443	3,01,128	2,286,790	1,38,76,782	2,437,721	1,43,55,611
1878-79,	51,313	1,22,497	2,291,483	1,41,78,434	2,365,306	1,44,60,151
1879-80,	100,994	2,27,384	1,972,374	1,18,87,671	2,111,156	1,22,94,217
1880-81,	58,179	1,45,901	2,579,741	1,51,80,589	2,665,604	1,54,75,409
1881-82,	104,095	2,58,053	2,291,745	1,36,72,463	2,450,690	1,41,38,144

About 120,000 tons of iron are imported into India, of annual value about 1½ kror of rupees, and almost entirely from the United Kingdom.

The native furnaces throughout India are of the same pattern, small circular structures 4½ to 5 feet high, built of earth, and the product brings in the villages a higher price (£23 the ton) than iron from Europe (£18 the ton). The Kutub near Dehli, 23 feet 8 inches, is a remarkable illustration of what the ancient blacksmiths could do; and the great gun on the ramparts of Bijapur, cast at Ahmadnaggar about the 16th century, is another.

Iron, Red Oxide.

Tze-jen-tung, . . . CHIN.	Roth eisen oxyde, . GER.
Sesquioxide of iron, ENG.	Ferri sesquioxidum, LAT.
Peroxide of iron, . . .	F. peroxidum, . . .
Colcothar, . . . ENG., LAT.	F. oxydum rubrum, . .
Peroxide de fer, . . . FR.	Crocus martis, . . .

This occurs native in the Chinese provinces of Shen-si and Kiang-si.

Iron Rust.

Sadid ul hadid, . . . ARAB.	Karatan basi, . . . MALAY.
Than khya, . . . BURM.	Irambu tapu, . . . TAN.
Tai basi, . . . MALAY.	Tuphu,

Iron, Sulphate of, Ferri Sulphas.

Bala-dokta, . . . BENG.	Hara tutia, . . . HIND.
Luh-fan, T'ing-fan, CHIN.	Solfato di ferro, . . IT.
Tan-fan, Tsau-fan, . . .	Ferrum vitriolatum, . LAT.
Green vitriol, . . . ENG.	Sal martis,
Green copperas,	Tarusai, MALAY.
Sulfate de fer, . . . FR.	Zunkur madni, . . PERS.
Schwefelsaures eisen, . .	Tutiya subz,
Oxydul, Eisen vitriol, GER.	Unna, Anna baydi, . TAN.
Hera kasia, . . . HIND.	

Sulphate of iron is the sulphate of the protoxide of iron, and occurs in the form of green crystals, soluble in water. The salt is formed abundantly by natural oxidation of the sulphuret of iron, a mineral especially common in coal districts. The sulphuret, absorbing oxygen from the atmosphere, is converted into the sulphate of the protoxide of iron; this is apt to be changed into the red-

coloured sulphate of the sesquioxide. It is made artificially on a large scale, for use in the arts, by exposing moistened pyrites to the air. It occurs in the Indian bazars in large masses of green crystals, and in a state of considerable purity. It was known to the ancients, is mentioned in the Amara Kosha of the Hindus, and it is used by them, as by the Romans in the time of Pliny, in making ink. A very cheap green copperas in China is largely used in the mission hospitals as a disinfectant, also in dyeing black, and as an emetic in cases of poisoning. The natives of India have long known the use of acetate of iron, which they prepare by macerating iron in sour palm-wine, or in water in which rice has been boiled.—*Royle, Mat. Med.*; *O'Sh., Beng. Phar.* p. 325; *Royle, Hindu Medicine*, p. 44; *Smith, M. M. C.*; *Local Committee, Jubbulpur*; *Captain Stover, 1873*; *Smith; Balfour's Report on the Iron Ores, Iron and Steel of the Madras Presidency*; *Prof. Max Muller's Lectures*, p. 223; *M'Culloch's Commercial Dictionary*; *Powell's Handbook*; *Madras Ex. Jur. Reports*; *Cat. Ex.*, 1862; *Carter's Geological Papers*; *Voysey*; *Moral and Material Progress of India*; *Cat. and Jur. Report, Exhibition of 1851*.

IRON-BARK TREES, a commercial name applied in Australia to several species of *Eucalyptus*. *E. sideroxylon* is a valuable timber tree, possessing great strength and hardness, and much prized for its durability by carpenters, ship-builders, for top-sides, trenails, the rudder stock, and belaying pins; by waggon builders, for wheels, poles, etc.; and by turners for rough work. It is much recommended for railway sleepers, and is extensively used in underground mining work. It somewhat resembles the red gum tree, but it is more difficult to get large trunks of it sound in the heart. See *Eucalyptus*.

IRON-WOOD.

Pya of	AKYAB.	Lignum ferreum, . .	LAT.
Pieng,	"	Sideroxylon, . . .	"
Jerntra,	DAN.	Pao de ferro, . . .	PORT.
Yserhout,	DUT.	Tverodrevnik, . . .	RUS.
Hois de fer,	FR.	Naw,	SINGH.
Eisenholz,	GER.	Palohierro,	SP.
Legno di ferro, . . .	IT.	Jerntra,	SW.

Iron-wood is a commercial term applied to a variety of woods, in consequence of their hardness, and almost every country has an iron-wood of its own. One, the product of an evergreen tree, *Sideroxylon*, remarkable for the hardness and weight of its timber, which sinks in water, receives this name; it is of a reddish hue, and corrodes like iron. This tree grows chiefly in the West India Islands, and is likewise very common in South America. *Mesua ferrea*, a tree furnishing one of the iron-woods, and which, also, has received its specific name from the hardness of its wood, is a native of Ceylon and of the two Peninsulas of India, of Northern India, Malacca, and of the islands. *M. pedunculata* likewise furnishes part of the timber known under this name. That of Arakan is the *Xylia dolabriformis*; but in Ceylon, the *Maba buxifolia* and *Mimusops Indica* also furnish the iron-woods of that island. The Ceylonese have also an iron-wood tree known under the name of Naw, of the western provinces of Ceylon, perhaps the *M. ferrea*. It is described as used for bridges and buildings. The timber of the *Metrosideros vera* of China is called true iron-wood. The Chinese are said to

make their rudders and anchors of it, and, among the Japanese, it is so scarce and valuable, that it once was only allowed to be manufactured for the service of their king. The iron-wood of southern China, however, is *Baryxylon rufum*; of the island of Bourbon, *Stadinannia sideroxylon*; and of the Cape of Good Hope, *Sideroxylon melanophleas*, which latter is very hard, close-grained, and sinks in water. That of the Canara forests is from two species of *Memecylon* (*ramiflorum*, *umbellatum*), and on the Coromandel coast the term is occasionally applied to the wood of the *Casuarina equisetifolia*. In Tenasserim, the term is applied to the woods of *Inga xylocarpa* and *I. bijemina*, and to that of a species of *Diospyros*. The iron-wood of Australia is from a species of *Eucalyptus*, *E. sideroxylon*, and that of Norfolk Island from the *Notelea longifolia*. The iron-wood of Guiana is from the *Robinia panacoco* (of Aublet), that of Jamaica is the *Fagara pterota*, and *Erythroxylum areolatum* is also called red-wood. *Agiphylla Martinicensis* and *Coccoloba latifolia* are other West Indian trees, to the timbers of which the name of iron-wood has been applied; and *Ostrya Virginica*, called American hop hornbeam, has wood exceedingly hard and heavy, whence it is generally called iron-wood in America, and in some places lever-wood. Under the name of iron-wood, two specimens were sent by the Calcutta Committee to the Exhibition of 1862. One of them, *Pya, Vern.*, a tree of Akyab, grows to a moderate size, and is plentiful in the Sandoway and Ramree districts. The other iron-wood, *Pieng, Vern.*, also a tree of Akyab, grows to a large size, and is very plentiful in Arakan; its wood is very hard, and used for posts. One of these is perhaps the *Xylia dolabriformis*, *Benth.* The iron-wood of the South Sea Islands is the timber of the *Casuarina equisetifolia*. The iron-wood of New Zealand is the *Vitex littoralis*. The Aki or *Lignum vitæ* of New Zealand, the Rata and the Pohutu kawa of the same country, are all hard-wooded trees belonging to the genus *Metrosideros*, *Lindley*; and several other species of *Metrosideros* have been described, natives of Australia and the South Sea Islands, as furnishing iron-woods of commerce. The *Metrosideros buxifolia* of Allan Cunningham is the New Zealand plant called Aki, and is a rambling shrub, adhering to trees, and climbing by means of its lateral roots to the summits of the loftiest trees in the forests of Wangaroa and the Bay of Islands.—*Eng. Cyc.*; *Holtzapfel*; *Faulkner*; *Macgillivray*; *Dr. Bennett*; *Mr. Mendis*; *Dr. Mason, Cal. Cat. Ex. of 1862*; *M'Culloch*.

IRRIGATION.

Wasserung,	GER.	Regamiento, . . .	IT.
Befeuchtung, . . .	"		

Generous as the Indian soils usually are, and favourable as are the seasons in the plains and valleys of British India, the amount of the rainfall, one year with another, varies by fifty per cent. above and below the average. Rain is frequently absent for many weeks, and without some artificial means of supplying the soil with moisture, no crops could at those periods be taken off the ground. Something can be grown with water, nothing can be obtained without it; and throughout the south and east of Asia the efforts of the rulers and the people have been directed to obtain and hoard the water supply. Of the seven

IRRIGATION.

regions into which British India has been divided for hygrometric purposes, two only have their fill of water from natural sources. In the drier regions the rainfall is precarious as well as scanty, and wide expanses of good soil lie permanently untilled and tenantless. A good part of the Panjab and the whole of Sind would be scarcely habitable without irrigation, and in the south-eastern quarter of the Madras Presidency it is indispensable. The natives of these regions have, from unknown times, been forming tanks, digging canals, and leading off channels from rivers, some of them betokening great skill and great labour; and in the 18th and 19th centuries the labours of British engineers, especially of those of the Madras Presidency, have been conspicuously successful in irrigation. Sir Arthur Cotton, in Tanjore, reconstructed and enlarged the ancient irrigation works with such effect, that during the first sixteen years 50,000 acres of land, previously waste, were brought under tillage, the average produce per acre was increased by one-eighth, and the selling value of the land was doubled. In the delta of the Godavery, where Sir Arthur Cotton next went, notwithstanding its rich alluvial soil and fostering climate, alternate flood and drought had brought famines. The territory is now a luxuriant garden, 265,000 acres having been brought under humid cultivation, and the population is prosperous. The Ganges Canal, which diffuses irrigation over an area 320 miles long by 50 broad, is the most magnificent work of its class in the whole world, having a main channel 348 miles long, primary branches of 306 miles, and minor arms of an aggregate length of 3000 miles. In one place this canal is carried over a river 920 feet broad, and thence for nearly three miles along the top of an embankment 30 feet high.

The irrigation canals of the Tigris and Euphrates have not retained their ancient magnificence, but the oases around Bokhara and Khiva owe their value to the irrigation channels led from the Oxus. In Persia, Karez aqueducts are largely in use for irrigation, and the Nizam Shah dynasty of Ahmadnagpur formed several of these on the north of their capital.

In India, irrigation is carried on from wells and from tanks, and largely from channels led from its rivers, well irrigation being employed for garden culture, and to supplement the rainfall. The efforts made by several of the races to preserve and utilize the water from the rains and rivers, have been gigantic, as in the cyclopean Gorbasta structures of Baluchistan, where dams of huge stones have been drawn across the valleys by a race of whose history nothing is known. In India both Hindus and Muhammadans have made great artificial lakes, with dams or bunds, often highly ornamental. One of the most beautiful is that of Kankroli or Rajnagar in the Mewar or Udaipur State. Its retaining wall is about 2 miles long, and the area is about 12 square miles. It is 376 paces in length, is covered by white marble steps,—a fairy scene of architectural beauty.

The great tank at Cumbum, in the Ceded Districts, is 8 miles in circumference, and covers an area of nearly 15 square miles; that at Ulsoor, near Bangalore in Mysore, is of equal size. The magnificent lake constructed by Mir

IRRIGATION.

Alam, near Hyderabad in the Dekhan, as a famine work, has a steamer on it.

Wells or reservoirs, known as the Bai, Baori, or Baoli, have been formed in many parts of India, with flights of steps and a succession of platforms, enclosed by arches, leading down to the water.

Most of the waterworks constructed by the Muhammadans in India were undertaken to obtain water for their parks and palaces. It is to the Hindu races, Aryan and non-Aryan, and in recent times to the British, that India is indebted for the great tanks and irrigation canals which are now to be seen. The smaller tanks in the south of the Peninsula of India, all of Hindu origin, are multitudinous, and some of them are of great size. To Hindus also India is indebted for the great aucuts or dams which head back the waters of the Cauvery and the Colerun.

Some of the great irrigation works, both in Northern and Southern India, have been so constructed as to be available also for navigation. Navigation on the Orissa canals in 1877-78 yielded £3384; on the Midnapur canal, £10,692; and on the Sone canals, £5965, the aggregate being larger than was derived from irrigation. In Madras, boat tolls in the Godavery delta brought in £4496, and in the Kistna delta (Madras canals), £1718. The works of the Madras Irrigation Company on the Tumbudra were not made available for navigation until 1879. The canal was projected for irrigation and navigation, which should extend from Sunkesala, 17 miles above Kurnool, to the Kistnapatam estuary on the sea-coast of Nellore, and the Madras Irrigation Company undertook that part of it between Sunkesala and the Pennar river at Sumaiswaram, and subsequently to the town of Cuddapah. It was completed in 1871, but it has been financially a failure, attributable to the heavy charges for maintenance and establishment, to the unprofitable outlay on the navigation works, and the scarcity of labour.

In the Bombay Presidency, near Poona, the British have erected a masonry dam to form Lake Fife, one of the finest reservoirs in the world.

The British have drawn one great canal from the Ganges at Hardwar; they have improved and enlarged an old canal which the Muhammadans brought to Delhi from the Jumna; a great canal has been led from the river Sutlej, in the Sirhind division of the Panjab, another from the river Ravi north of Lahore, for the Amritsar district; with many lesser streams for Multan, and for the inundation canals of the Derajats. In Behar a great canal has been taken from the Sone river; in Orissa the Mahanadi has been dammed farther south, as has also the Krishna river at Bezwar, and the Cauvery and Colerun river near Trichinopoly. But what is there accomplished on a very large scale by the British India Government is, throughout many parts of the country, performed by the villagers themselves. For miles the Hindu cultivator will carry his tiny stream of water along the brow of mountains, round steep declivities, and across yawning gulfs or deep valleys, his primitive aqueducts being formed of stones and clay, the scooped-out trunks of palm trees and hollow bamboos. And sometimes, in order to bring the supply of water to the necessary height, the pe-cottah or the bucket-wheel is employed, worked by men, by oxen, by buffaloes, or by elephants,

and in the more level tracts of the south of the Peninsula every little declivity is dammed up to gather the falling rain.

And, independent of the general benefits to the people, great profits have been made by the British Government in several cases, by restoring or repairing tanks and channels which had become ruined, such net profits amounting to from 10 to 45 per cent., and in one instance to 250 per cent. And it is believed that the construction of large storage reservoirs would return a high percentage on the outlay. The smaller tanks constructed by the people themselves well repay the labour employed, though to the Government the construction of flat country tanks of the second class, or even of the third class, offer a very doubtful return.

The value of water to the cultivator is shown, first, by contrasting the yield of dry crops with that of rice and sugar-cane, from actual experiments. From these it appeared that the net profit per acre on dry crops was 8s. 2½d.; on rice, £4, 16s. 10½d.; and on sugar-cane, £18, 6s. 6d. In the two last cases a very low rate for the water was assumed, viz. 12s. per acre for each crop of rice, and 24s. per acre for each crop of sugar-cane, as provisionally fixed by Government. A comparison was made between dry crops and rice, and dry crops occasionally flooded, based on the average price of grain extending over five years, and deducting one-fourth from the gross value of the crop in the case of dry crops, and one-sixth in the case of wet crops, to cover loss in bad years. Without deducting the water rate, the difference in the net value of the crops was as follows:—Between dry crops and rice, taking the most unfavourable comparison, 25s. 7d.; between dry crops and the same occasionally irrigated, 30s. 8d.; and between two dry crops and sugar-cane (which occupied ten months of the year), £8, 2s. 8d. But if water be stored, so as to allow a second crop of rice to be grown, the advantages are nearly doubled. Provided a water rate proportioned to the value of the water were fixed, irrigation would benefit the cultivator to the extent of 8s. 6d., or 50 per cent., and yield a gross return on the outlay of 14s. 9d. per acre; and if water were stored for a second crop, the gain to the cultivator would be 19s. 9d., or more than 100 per cent., and the return to the agency supplying the water 37s. 3d. per acre, the cultivator not having to expend any capital in improvements. Of the 37s. 3d. per acre profit, 22s. 6d. was about the sum due to the storage of water, supposing such storage works to be added to distribution works already constructed. The cost of large works of irrigation might be safely reckoned at £7 per acre on an average, or £8, 15s. if 5 per cent. on one-half the capital for ten years during construction were added. If the profits made by the application of the water were divided in the proportion of one-third to the cultivator and two-thirds to the agency supplying the water, works of channel irrigation would benefit the cultivator, as above stated, to the extent of 50 per cent., and yield a net return of 7½ per cent. on the capital expended. It appears probable that, in the most favourable localities, 7000 cubic yards of water could be stored for £1, and in others 4250 cubic yards.

A committee was appointed by Lord Canning to consider the views as to irrigation held by

Colonel Sir Arthur Cotton and Colonel Crofton, and they decided in favour of Colonel Crofton's views against those of Sir A. Cotton. Of the reasons given for its decision one was their objection to the construction of a weir across the Ganges, below the confluence of the Solani, at the estimated cost of £1,128,631, to pass a volume of water over the Ganges of 30,000,000 cubic yards. But the Godavery weir, to pass above 200,000,000, only cost £90,000; the Cauvery weir, to pass the same volume as the Ganges, 30,000,000 cubic yards, only cost £15,000; the Kistna weir, to pass 180,000 cubic yards, only £100,000; the Tumbudra weir, for about double the volume of the Ganges, only £30,000. The average estimate for weirs on similar rivers in Madras is about £500 per million cubic yards of volume per hour; while the estimate of the Ganges Canal Committee was nearly £40,000 per million.

Only rivers of the larger class, which have a continuous flow for several months, are available for extensive irrigation projects. The smaller rivers are merely torrents, which quickly carry off heavy falls of rain, and then become dry again. The water, however, is in many cases intercepted by chains of tanks, of the second or third class, built across these torrents.

The deltas of large rivers, being the most easily irrigated lands, have been so treated for ages, and the works have been much extended and improved under the British Government, by the construction of permanent weirs of great lengths at the heads of the deltas, such weirs being built on the sandy beds of wide rivers subject to heavy floods. This seemed to have been beyond the skill of the ancient native rulers. They, however, built many weirs on the large rivers in the middle part of their courses, the situations being skilfully chosen, but the construction was rude and imperfect. They were generally built on a reef of rocks, with loose rubble, faced with large blocks of granite laid dry, and sometimes fastened with iron clamps. The modern weirs in similar situations are of masonry, with a vertical or slightly battering face on the down-stream side, and with heavy copings. In rivers having sandy beds, it is usual to build the body of the weir on a foundation of brick wells, sunk to the low-water level, and filled with concrete. On the lower side there is an apron, having a slope of 1 in 12 from the crest, with a toe wall; and if the slope be long, intermediate walls are also built on wells, and below all there is a broad layer of rough rubble of large dimensions.

The ancient irrigation channels were generally defective in design, being too small, and having much too great a fall. In consequence of these channels being so near the river, they irrigated only a narrow strip of land; and the current being too great, excessive annual repairs were required. This system necessitated numerous off-takes from the river, involving the expense of many weirs, and a great aggregate length of unproductive channel, from the offtake to the point where the channel reached such a level as to command the surface of the country. On the other hand, a canal of large dimensions, taken off from one head, having a slower current and less fall, would soon so gain on the level of the river that it would reach districts remote from it, and con-

sequently more in need of artificial supplies of water; and it would also command a much larger extent of country than it could supply entirely with water. This was an advantage, because it would be many years before a district could be completely changed from dry to wet cultivation, as it would require to have its population trebled. It also afforded means of assisting dry crops in years of drought, and thus preventing famine. In many districts complete failure of the crops now grown occurred every few years, and a good crop was a rare occurrence. There should therefore be facilities for completely irrigating detached areas at considerable intervals, and of giving occasional irrigation to dry crops.

Distribution was effected from the second class of tanks directly, by means of sluices in the bund. From the third, and more especially from the first class, it was commonly effected indirectly; thus the natural channel of the river or rivers, which had been dammed to form the tank, were used to carry part of the water for irrigation, weirs being built across them at suitable places, and artificial channels taken off from above them. By these means the surplus of the water, which was generally wastefully used by the ryots, was saved, being collected by drainage into the stream, and redistributed at the next weir. Distribution was most economically effected from a canal, when the latter ran along a ridge; but as this could rarely be accomplished in the case of a canal taken off from a main drainage, it was next best effected by leading the main distribution channels down the ridges crossed by the canal. Distribution could be carried out in the Ceded Districts for 5s. per acre, including sluices in the main canal, and all necessary road and water crossings, but excluding the cost of terracing the land to prepare it for wet cultivation, this being done by the occupier. The nature of the ground was occasionally such that the drainage was effected naturally, no works being required for that purpose beyond small open trenches in the rice fields.

Ordinary agricultural works in the Madras Presidency irrigate an area of about 3,365,157 acres, yielding a revenue of approximately Rs. 1,31,04,126. They consist of two kinds, viz. (1) rain-fed tanks or reservoirs, generally of minor individual importance, each deriving its supply directly from rainfall distributed over an area of land, which is called the catchment basin; and (2) channels from rivers and streams providing direct irrigation, or supplying tanks, together with the tanks supplied. In the first case, the rainfall is caught and retained before it reaches natural lines of any importance. In the last, it is diverted from the drainage lines while pursuing its course, and led away by artificial means. In connection with these last are the anicuts or weirs which have been constructed by former governments and under British rule. About 1876, there were in the Madras Presidency 1212 weirs across rivers or streams, 769 of which were in the three districts of Madura, Salem, and S. Arcot. There were 33,318 tanks and irrigation canals, of which the districts of Coimbatore, Vizagapatam, Kistna, Kurnool, and Nellore had only 2590. The irrigated area from all these was approximately 3,365,157 acres, and the revenue Rs. 1,31,04,126. Besides these, there were irrigation works belonging to landlords, also others

belonging to the Government irrigation systems, for which capital and revenue accounts are kept. Of these last, the principal are the anicuts or weirs across the rivers Godavery, Kistna, Pennar, Cauvery, Vellar, Palar, and Tambrapurni, and the great reservoir of Chembrumbakam.

It was Lord Canning's opinion that the construction of great irrigation works might be entrusted to private companies; but the Madras Irrigation Company and E. I. Irrigation Company formed at that time (1861) for the Tumbudra and Mahanadi, have been pecuniarily unsuccessful. For the Mahanadi river scheme, for instance, the capital raised in June 1861, nearly a million sterling, was intended to be utilized in certain initiatory parts, amounting to about one-half of the complete scheme, which was estimated at two million sterling. To meet the second half of the scheme a second million was to be raised when wanted, by a second issue of shares. The works began in December 1863. Irrigation was first available in December 1865, but was first taken up in April 1866, giving returns in October 1866. Navigation began to pay in March 1863, but eventually the scheme was bought up by Government in December 1867. The initiatory half of the works was not then perfectly completed, but was nearly so. The estimates having been exceeded, the first issue of one million was very nearly spent. The navigation returns from March 1863 to August 1867 amounted to £5922. The cultivators refused to pay for the water. In the year 1872-73 the total acreage of irrigation was only 4753 acres, yielding £4263 in water rates, and the navigation returns on a tonnage of 154,422 tons amounted to £4750; the total receipts, including £1481 from other sources, amounted to £10,293 for that year.

Mr. Latham, chief engineer of the Madras Canal and Irrigation Company, reported that the expectation, based upon the experience of the north-western canals, that irrigation would not fall off much after its value had once been felt during the famine, has proved delusive. Yet the increase caused by the famine had been but moderate:—

1875-76 (before the famine),	13,928.45 acres.
1876-77 (the year of failure of rain),	24,545.08 "
1877-78 (a year of famine and late rain),	27,922.17 "
1878-79 (a year of excessive rain),	14,731.49 "

The Tumbudra canals were led from a weir, 4500 feet long, across the rocky bed of the river at Sunkesala, and it was intended to reach 250,300 acres of rice cultivation up to the year 1865. The Madras Irrigation and Canal Company had realized less revenue than sufficed to cover the working expenses. Up to the end of 1877-78, the total outlay was Rs. 1,52,73,352. The attempt to make it suitable for navigation added Rs. 36,80,584 to its cost. The canal was designed to irrigate 200,000 acres of wet crops, or a corresponding area of other crops. But the largest area irrigated was in the famine year 1876-77, when it reached 82,477 acres, viz. wet crops 24,545, dry crops 67,932. It is now recognised that canals for traffic must have the same width and depth from their commencement to their termination; but that irrigation canals, by giving off channels along their course, should gradually fine away to their end.

Between 1862-63 and 1872-73 the acreage irrigated by the Western Jumna Canal was from

331,037 to 496,542 acres; in the Eastern Jumna Canal, from 160,355 to 274,101 acres; the Bari Doab Canal, from 126,016 to 287,079 acres; and the Ganges Canal, 205,605 to 1,078,399 acres.

In 1869, the Eastern Jumna Canal irrigated 102,322 acres; in 1877, 103,632 acres; and in 1878 it was 110,722 acres, yielding a revenue of Rs. 18,56,440.

Panjab.—Of the twenty-one million acres under cultivation in an average year in the Panjab, only five and a half million acres (of which four and a half millions are under food crops) are irrigated by artificial means. One and a half million acres more are situated in the beds of the Panjab rivers, and require little rain to bring their produce to maturity. Of the remaining twelve and a half million acres under food crops (making 18½ millions altogether under this description of produce), six and a half are pretty safe, being grown under an abundant and a reliable rainfall in the submontane districts, and six millions produce a more precarious crop, being wholly dependent on the less certain rainfall of the tract farther south. It is roughly estimated that on an average for the whole province an acre of irrigated land produces half as much again as an acre of land wholly dependent on rain. This ratio gives one-third of the total yield of food grains as the produce of irrigated land, and two-thirds as dependent on rainfall or rain-floods. Following out the comparison into more detail, it is calculated that 36 per cent. of the whole supply of food grains is produced by land artificially irrigated, 43 per cent. by land more or less protected by floods or abundant rainfall, and only 21 per cent. by land dependent on a more precarious rainfall. The chief means of artificial irrigation are wells, which irrigate three millions of acres; inundation canals, chiefly from the rivers of the Panjab proper, irrigate one million; and perennial canals, of which the Western Jumna and Bari Doab Canals are the chief, protect only three-quarters of a million of acres.

There are several plans by which, in British India, water is lifted. One of these, from wells, is by means of the 'mot' or 'pur,' a flexible leathern bucket containing from 2½ to 12½ gallons, which is attached by a strong rope to a pulley. In masonry wells in the north of India, from 4 to 20 runs can be worked at one and the same time, and at unbricked or Kach'ha wells more than two runs are seldom worked. The runs—called 'lao,' from Lana, to bring—are worked by men or women, bullocks, and buffaloes, but generally bullocks. Whatever power may be employed in a garden or field of any size, one person is needed to receive and empty the bucket at the mouth of the well, another to drive the bullocks, and a third to distribute the water. In a small patch of land two persons will suffice. Human labour is the most expensive, but is the quickest. About two standard bighas can in one day be irrigated in the above manner by one set of labourers.

Irrigation is sometimes effected by hand labour, two men raising the water by means of a bamboo or leather bucket or basket, swung from ropes. In the Doab of the Ganges and in Rohilkhand, it is called beri, lehari, ch'hapa, boka; in Benares and Oudh, dauri; and in Delhi and Bundelkhand, dal, dugla, dulia. In Sind and in the Panjab,

the Persian wheel, a series of earthenware buckets on the periphery of the wheel, is largely used.

In Delhi and the Doab, dal is the name applied to the basket or bucket used for raising water from a deep well. It is made sometimes of leather, but generally of munj (*Saccharum munja*) or jhau (tamarisk). It is more expensive than the 'tor' irrigation, which consists in merely breaking down the field ridge. Sugar-cane, poppy, and garden crops are irrigated, where possible, from wells only, even when the expense of drawing water from a deep well is fourfold that of shovelling it out of a hollow on the earth's surface; and practical agriculturists entered rates one-fifth higher on lands irrigated from wells than those watered from dhils or ponds.

Where the natural rains are the sole means of irrigating the lands, only one crop can be raised annually, and even that, in difficult seasons, is unobtained. But with artificial irrigation two and three crops can be raised,—a monsoon, a cold-weather, and a hot-weather crop.

In Farrakhabad, where three crops are obtained, Indian corn sown in June—July, and harvested in August and September, is the first crop. In October—November, potatoes or carrots are planted as a second crop, and taken up in February or March; and the third crop is tobacco or melons, sown in April, and gathered in May or June.

Cost.—From the commencement of the Godavery delta irrigation system of works up to 1877-78, the sum of Rs. 78,77,781 had been expended. The area irrigated under the anicut was 541,892 acres, in 1876-77, yielding a revenue of Rs. 22,98,423, divided into a water tax of Rs. 15,91,767, and land assessment Rs. 7,06,656. The total expenditure for the Kistna delta system has been Rs. 48,40,546. This system is intended to irrigate 470,000 acres. Of that extent, 246,000 were irrigated in 1875-76, yielding a revenue of Rs. 10,98,978, viz. water tax Rs. 7,32,756, and land tax Rs. 3,66,222. Out of 321 miles of canal proposed for navigation in this delta, 267 miles had been opened for traffic up to 1877-78.

From the upper parts of the Cauvery river, channels have been conducted through the Trichinopoly and Tanjore districts, and the portions within the reach of the waters are cultivated like gardens. The great Colerun channel, quite like a great river and about a mile broad, is led off from the Cauvery, aids to form the sacred island of Srirangam, and is exhausted in irrigating the lands to the east. The Cauvery delta irrigation system irrigates 796,968 acres, yielding a revenue of Rs. 33,78,442. Up to the end of 1873-74, the sum of Rs. 13,39,641 had been expended on it by the British Government, which outlay has been estimated to yield a return of 85·81 per cent. The total expenditure on the Srivai Kuntham anicut in the Madras Presidency up to 1877-78, was Rs. 9,20,510. In Mysore, there are anicuts or dams at Nundur, Sri Ramadwara, and Maseehully, and a great reservoir is to be established at Mauri Conwai.

IRULAR. At the foot of the Neilgherry mountains, and for a short distance within the forests extending from their base into the plains, live a race commonly known by the name of Irular. They are in two classes,—one called Urali, the other Kurutalei. Iruli means unenlightened or barbarous, from the Tamil word Irul, darkness,

and is a term applied to them by their neighbours. Urali signifies the rulers of the people, and Kurutalei the common people. Captain Harkness met with a group of Irulars all but naked, —men, women, and children dancing, jumping, and amusing themselves. The hair of the men, as well as of the women and children, was bound up in a fantastic manner with wreaths of plaited straw; their necks, ears, wrists, and ankles decorated with ornaments formed of the same material; and carrying little dried gourds, in which nuts or small stones had been placed, they rattled them as they danced, and, with the rustling of their rural ornaments, gave a sort of rhythm to their motion. His unexpected visit disconcerted them at first, but this was soon got over, and the dance again resumed, in front of a little thatched shed, which was their temple. When it was concluded, they sacrificed to their deities a he-goat and three cocks. This was done by cutting the throats of the victims, and throwing them down at the feet of the idol, the whole assembly at the same time prostrating themselves. Within the temple there was a winnow or fan, which they called Mahri, and in front of the temple two rude stones, which they called, the one Meshani, the other Konadi Mahri, but which are subordinate to the mahri or fan occupying the interior of the temple. No great distance from this, he passed their places of sepulchre, there being one for the Urali and another for the Kurutalei. These sepulchres are pits, about thirty or forty feet square, and of considerable depth, over which are placed large planks; above is erected a shed, covering in the whole, and protecting it from the weather. In the centre of the planks is an opening about a cubit square, over which are placed other pieces of wood, and on these is raised a small mound of earth in the form of an altar, the surface being decorated with pebbles, placed there both as memorials of the departed, and as objects of future worship. When a death occurs, the mound of earth is removed, and the body thrown in. Some ten or twelve days after, a mound of fresh earth is raised, in room of the one which had been removed; the pebbles, which in the first instance had been carefully put aside, are again replaced, and another one added to them in memory of the deceased. All this is done with much ceremony, the pebbles being anointed with oil, perfumed with frankincense, and decorated with flowers. Food is also distributed to the assembly, according to the ability of the relatives of the deceased. The Irulars speak a rude Tamil.—*Captain Harkness' Neilgherry Hills.*

IRVINE, ROBERT H., a medical officer of the Bengal army, who rose to the rank of Deputy Surgeon-General. He wrote (1841) an *Account of the General and Medical Topography of Ajunir.*

IRWIN. Lieut. Irwin accompanied Mountstuart Elphinstone to Afghanistan; the amount of multifarious information he collected is altogether surprising.

IRWIN, EYLES, an officer of the East India Company, author of a *Series of Adventures in the Course of a Voyage up the Red Sea, on the Coast of Arabia and Egypt, in the year 1777.*

ISA, also called Isana, the Hindu deity, presiding over the N.E. quarter of the heavens; a name of Siva.

ISA KHEI, a town and division in the Banu district on the N.W. frontier of India, 42 miles from Banu, and 28 S. of Kalabagh. The town, with 7440 inhabitants, is 9 miles W. of the main branch of the Indus, opposite the Rokri Ferry. The Isa Khel division is enclosed between the Indus and the Cuttack Hills, and has a population of 46,000 souls, mostly clans of the Niazi, descendants of Niaz Khan, second son of Lodi, the son of Shah Husen, king of Ghor, from whom the Lohani and Ghilzai claim descent. With the Isa Khel, money is never given to the bride's father, as is the custom of all other Pathan tribes, and every woman of the Isa Khel branch, however humble, is strictly Goshu. The other tribes and races are Awan, Baluch, Hindus, Jat, Cuttack, Khudzai, Korashi, Pathan, Shaikhs, Syuds, Khatak. The Niazi are trusty allies of the British.—*MacGregor.*

ISANI. Colonel Tod describes a lofty three-peaked mountain, on which is a temple dedicated to Aya - Mata, also called Isani, the tutelary divinity of the Kol. This and the effigy of the horse are there the only objects of adoration among this aboriginal race. This was the first time he had seen a personification of mother earth, for such is Isani, from Isa, goddess, and Anani, earth, the universal nurse-mother (Aya-Mata). In their worship of the horse they resemble the other forest tribes, the Bhil, the Gond, and the Surya. Among the many remarkable festivals of Rajasthan kept with peculiar brilliancy at Udaipur, is that called Gangore, in honour of Gouri or Isani, the goddess of abundance, the Isis of Egypt, the Ceres of Greece. Like the Rajput saturnalia, which it follows, it belongs to the vernal equinox, when nature in these regions proximate to the tropic is in the full expanse of her charms, and the matronly Gauri casts her golden mantle over the beauties of the verdant Vassanti. Then the fruits exhibit their promise to the eye, the koil fills the ear with melody, the air is impregnated with aroma, and the crimson poppy contrasts with the spikes of golden grain to form a wreath for the beneficent Gauri. Gauri is one of the names of Isa or Parvati, wife of Siva, Mahadeva, or Iswara, who is conjoined with her in these rites, which almost exclusively appertain to the women. The meaning of Gauri is yellow, emblematic of the ripened harvest, when the votaries of the goddess adore her effigies, which are those of a matron painted the colour of ripe corn; and though her image is represented with only two hands, in one of which she holds the lotus, which the Egyptians regarded as emblematic of reproduction, yet not unfrequently they equip her with the warlike conch, the discus, and the club, to denote that the goddess, whose gifts sustain life, is likewise accessory to the loss of it; uniting, as Gauri and Kali, the characters of life and death, like the Isis and Cybele of the Egyptians. But in the Gangore festival she is only seen as Anna-purna, the food-filler, benefactress of mankind. The rites commence when the sun enters Aries (the opening of the Hindu year), by a deputation to a spot beyond the city, 'to bring earth for the image of Gauri.' When this is formed, a smaller one of Iswara is made, and they are placed together; a small trench is then excavated, in which barley is sown; the ground is irrigated and artificial heat supplied till the grain germinates. By rites known only to

the initiated, having been performed for several days within doors, they decorate the images, and prepare to carry them in procession to the lake. During these days of preparation, nothing is talked of but Gauri's departure from the palace,—whether she will be as sumptuously appalled as in the year gone by; whether an additional boat will be launched on the occasion, though not a few forget the goddess altogether in the recollection of the gazelle eyes (*mirg-ani*) and serpentine locks (*nagni zoof*) of the beauteous handmaids who are selected to attend her. At length the hour arrives, the martial *nakāra* give the signal to the cannonier without, and the guns on the summit of the castle of Ekling-garh announce that Gauri has commenced her excursion to the lake. The cavalcade assembles on the magnificent terrace, and the rana, surrounded by his nobles, leads the way to the boats, of a form as primitive as that which conveyed the Argonauts to Colchis. The scenery is admirably adapted for these fêtes, the ascent being gradual from the margin of the lake.

At length the procession is seen winding down the steep, and in the midst, borne on a path or throne, gorgeously arrayed in yellow robes, and blazing with 'barbaric pearl and gold,' the goddess appears, on either side two beauties wave the silver chamra over her head, while the more favoured damsels act as harbingers, preceding her with wands of silver, the whole chanting hymns. On her approach, the rana, his chiefs and ministers, rise and remain standing till the goddess is seated on her throne, close to the water's edge, when all bow, and the prince and court take their seats in the boats. The females then form a circle around the goddess, unite hands, and with a measured step and various graceful inclinations of the body, keeping time by beating the palms at particular cadences, move around the image singing hymns, some in honour of the goddess of abundance, others on love and chivalry, and embodying little episodes of national achievements, occasionally sprinkled with double entendre, which excite a smile and significant nod from the chiefs, and an inclination of the head of the fair choristers. The festival being entirely female, not a single male mixes in the immense groups, and even Iswara himself, the husband of Gauri, attracts no attention, as appears from his ascetic or mendicant form begging his dole from the bounteous and universal mother. It is taken for granted that the goddess is occupied in bathing all the time she remains, and ancient tradition says death was the penalty of any male intruding on these solemnities; but a late prince deemed them so fitted for amusement, that he even instituted a second Gangore. Some hours are thus consumed, while easy and good-humoured conversation is carried on. At length, the ablutions over, the goddess is taken up and conveyed to the palace with the same forms and state. The rana and his chiefs then unmoor their boats, and are rowed round the margin of the lake, to visit in succession the other images of the goddess, around which female groups are chanting and worshipping, as already described, with which ceremonies the evening closes, when the whole terminates with a grand display of fireworks, the finale of each of the three days dedicated to Gauri.

Gauri, Anna-deo or Anna-devi, and Anna-purna, filling with food, or the nourisher, are the names

applied to 'the mother of mankind,' when she places the repast before the messenger of heaven. Considerable resemblance is to be discerned between this festival of Gauri and those in honour of the Egyptian Diana at Bubastes, and of Isis at Busiris, within the delta of the Nile, of which Herodotus says, 'They who celebrate those of Diana embark in vessels; the women strike their tabors, the men their flutes, the rest of both sexes clap their hands and join in chorus. Whatever city they approach, the vessels are brought on shore, the women use ungracious language, dance, and indelicately throw about their garments.' Wherever the rites of Isis prevailed, we find the boat introduced as an essential emblem in her worship. Bryant furnishes an interesting account from Diodorus and Curtius, illustrated by drawings from Pocock, from the temple of Luxor, near Carnac, in the Thebaid, of the ship of Isis carrying an ark; and from a male figure therein, this learned person thinks it bears a mysterious allusion to the deluge. Colonel Tod, however, was inclined to deem the personage in the ark Osiris, husband of Isis, the type of the sun arrived in the sign of Aries (of which the rams' heads ornamenting both the prow and stem of the vessel are typical), the harbinger of the annual fertilizing inundation of the Nile, evincing identity of origin as an equinoctial festival with that of Gauri (Isis) of the Indo-Scythic races of Rajasthan.

'Heavenly stranger, please to taste
These bounties, which our nourisher, from whom
All perfect good, unmeasured out, descends
To us for food, and for delight hath caused
The earth to yield.'—*Paradise Lost*, book v. pp. 397, 401.

The German Suevi adored Isis, and also introduced a ship in her worship, for which Tacitus says he has no materials whence to investigate the origin of a worship denoting the foreign origin of the tribe. This Isis of the Suevi was evidently a form of Ertha, the chief divinity of all the Saxon races, who with her consort Teutates or Hesus (Mercury) were the chief deities of both the Celtic and early Gothic races, the Budha and Ella of the Rajputs; in short, the earth, the prolific mother, the Isis of Egypt, the Ceres of Greece, the Anna-purna (giver of food) of the Rajputs. On some ancient temples dedicated to this Hindu Ceres are sculptured on the frieze and pedestal of the columns the emblem of abundance, termed the *cumacumpa*, or vessel of desire, a vase of elegant form, from which branches of the palm are gracefully pendent. Herodotus says that similar water-vessels, filled with wheat and barley, were carried in the festival of Isis; and the Egyptian god Canopus is depicted under the form of a water-jar or Nilometer, whose covering bears the head of Osiris.—*Tod's Rajasthan* i. p. 570.

ISATIS INDIGOTICA. *Fortune*. A perennial, almost shrubby, dye plant of N. China. It furnishes a product almost similar to *I. tinctoria*, or dyers' woad. In China, colouring matter for dyeing blue is derived from two species of plants, the *Polygonum tinctorium* at the south, and the *Tien tsing* or *Isatis indigotica*, cultivated at Shanghai and Chusan, and largely in the Kewang-meow district, a few miles to the south.

Isatis tinctoria, Linn., the dyers' woad, is a tall herb of two years' duration, growing from the Mediterranean to Japan, succeeding best in rich limestone ground. Its fermented leaves furnish

a blue dye. The species of *Isatis* are numerous. — *Williams' Middle Kingdom*. See Dyes.

ISFAHAN, a chief town of Persia, formerly the capital of the country. It is built on the banks of the Zand-rud, and has about 60,000 inhabitants and 160 neighbouring villages. Isfahan occupies the central part of an oval plain, which is enclosed by a range of mountains, presenting a singularly serrated outline. The lowest part is on the N.E. and the highest on the S.W. side of the city. From an elevated pass leading through the rugged and rocky belt on the latter side, there is obtained a fine view of this mountain basin, whose circumference is about 30 miles. A distance of about 12 miles separates the mountains on the western side from those of the eastern; the shorter diameter being about 8 miles. It is well watered by the tortuous Zend-rud, which flows through it rather southward of its centre.

Mir Wais, chief of the Ghilji, died in 1715, and was succeeded by his brother, but shortly afterwards Mahmud, son of Mir Wais, became chief of the tribe. He left Kandahar with 25,000 men, marched to Kirman and on to Yezd, from which place he moved directly on Isfahan. He was opposed at Gulnabad, near that city, but obtained a complete victory, and he surrounded and blockaded the city, and soon the inhabitants suffered all the horrors of famine. The miseries endured are described by most writers as surpassing the greatest extremities ever known on such occasions.

The horrors of this siege have been described by the Polish Jesuit Krusinski, who personally witnessed them, and they are noticed in the *Histoire de Perse Depuis le Commencement de ce-Siècle* (the eighteenth) of M. la Mamyé Clairac, on authorities which cannot be disputed. The inhabitants of Isfahan were compelled by famine to devour not only mules and horses, but dogs and other creatures, which their religion taught them to consider as unclean. A woman endeavouring to strangle a cat, was heard to exclaim at every scratch or bite that she received, 'Thou strivest in vain, I'll eat thee notwithstanding.' The leaves and bark of trees were ground into a kind of meal, and sold by weight; shoe leather was boiled and used as food; at length human flesh became the chief support of many miserable wretches, who for a while were content with what they could collect from bodies that filled the public streets; but some were induced to murder their fellow-citizens, and it is even said that parents killed and devoured their own children. From the MS. memoirs of Ali Hazin, we learn that 'a crust or lump of bread was sold at so high a price as four or five gold ashrafi.' A pound of bread, according to Krusinski, attained, in September, the price of thirty shillings; and, in October, of above fifty. Among the calamities of this memorable siege, Ali Hazin laments the destruction of his library, which comprised about 5000 volumes, Arabic and Persian, many enriched with the marginal notes of his learned ancestors.

After a protracted siege, the king, Shah Husen, the last of the Safavi dynasty, went forth with all his principal courtiers in deep mourning, surrendered himself to Mahmud, and with his own hand placed the crown on the head of the conqueror (October 1722). The authors differ as to the numbers who perished, and also as to those whom Mahmud ordered to be slain after the submission.

Mahmud, after a brief reign of two years, became insane, and either died or was put to death (A.D. 1724), and was succeeded by his nephew, Nadir Namah. — *Sir W. Jones; Balfour's Memoir of Hazin*, p. 122; *Malcolm's Persia*, i. p. 644; *Elphinstone's Hist. of India*, pp. 631, 632; *History of the Revolution of Persia*, published by the Pere du Cerceau; *Ouseley's Travels*, iii. pp. 44, 45.

ISFANDYAR, the brazen-bodied; his son Bahman, surnamed Ardeshir, a prince of great renown, is one of the most conspicuous names amongst the heroes of the Shah Namah. See Persian Kings.

ISHA. ARAB. Evening prayer. Ishrak, prayer at sunrise.

ISHAA. JAP. A learned race of Japan, practising medicine.

ISHMAEL, son of Abraham, is supposed by Muhammadans to have been the son whom Abraham took to offer up in sacrifice. His lineal descendants were called Arab-ul-Mostaraba, or mixed Arabs. They occupied the Hejaz, and amongst their descendants was the tribe of Koresh. See Adnan.

ISHTAR, a goddess of the Babylonians, the biblical Ashtoreth.

ISINGLASS.

Loo-pa,	CHIN.	Hausblase,	GER.
Yu-kiau, Yu-piau-kiau,		Hausenblase,	
Husblas,	DA, SW.	Ichthyocolla,	GR.
Sounds, Swim,	ENG.	Cola di pesce,	IT.
Air-bag,		Palogpong ikan,	MALAY.
Swimming bladder,		Ari-ikan,	
Fish-maws,		Colla de peixe,	PORT.
Fish sounds,		Klei rubui, Karluk,	RUS.
Colle de poisson,	FR.	Colapez,	SP.
Carlock,			

The Greek name Ichthyocolla, is from *ιχθυς*, a fish, *κόλλα*, glue. Isinglass is from the German Hausenblase, from Hausen, the great sturgeon, and Blase, a bladder, being one of the coats of the swimming-bladder of fishes. Fish-maws or fish-sounds of commerce, exported from Calcutta, Madras, Penang, Mergui, Malabar, and Sind, are the sac-like membrane, slit open; some small, thin, and transparent, others three and four inches across in both diameters, something of the shape of short purses with spring clasps, of a light colour, and semitransparent, resembling in appearance the ordinary qualities of isinglass, especially some of the Brazilian kinds. Fish-maws, under the names Singally and Sozille, had long been carried away by the Chinese from Calcutta, Madras, and Bombay, at the rate of about a shilling a pound, without its being generally known that it was isinglass which was thus exported.

The swimming-bladder of fishes consists of three membranes, the outer or peritoneal coat, the middle membranous and muscular one, and the inner, glossy, highly vascular coat, which has a pulpy appearance, and is the membrane which forms the best isinglass. The fish which yield the European supplies are the great sturgeon, osseter, sevruka, and sterlet, also the *Silurus glanis*, barbel, *Cyprinus brama* and *C. carpio* and *Perca lucio-perca*, which do not belong to the tribe of sturgeons. In the fisheries of the Caspian and Volga, where the system is most complete, and the division of labour the greatest, the sounds and roes of the sturgeon are extracted immediately the fish are caught, and delivered over to the isinglass and caviare makers. The fresh sounds are first split open, and well washed to separate the blood, and any adhering extraneous matter. They are then

spread out, and exposed to the air to dry, with the inner silvery white membrane turned upwards. This, which is nearly pure gelatine, is carefully stripped off, laid in damp cloths, and left in the outer covering, and forcibly kneaded with the hands. It is then taken out of the cloths, dried in the form of leaf isinglass, or rolled up and drawn in a serpentine manner into the form of a heart, horse-shoe, or lyre (long and short staple), between three pegs, on a board covered with them; here they are fixed in their places by wooden skewers. When they are somewhat dried thus, they are hung on lines in the shade in well-arranged rooms till their moisture is entirely dissipated. The oblong pieces sometimes are folden in the form of book isinglass. Though isinglass of the finest quality, and in the largest quantities, is yielded by, it is not confined to, the sturgeon tribe; for even in Russia, the *Silurus glanis*, species of *Cyprinus* and barbel, yield it, and are met with in commerce with Brazilian, New York, and Hudson's Bay isinglass. The fishes which produce it on the coast of Brazil, Mr. Yarrell informed Dr. Royle, are probably several species of the genera *Pimelodus* and *Silurus*, or of closely-allied genera. The Brazilian isinglass is imported from Para and Maranh. It is very inferior in quality for domestic purposes to the best imported from Russia, which sells for 12s. per lb., and the other from 9d. to 3s. 6d. It is in the form of pipe, block, honeycomb, cake, and tongue isinglass, the last formed of a double swimming-bladder. The isinglass obtained from North America in the form of long ribbons, is produced, according to Dr. Mitchell, by *Labrus squateague*, at New York, called weak fish, which is about 15 inches in length, and above 6 lbs. in weight, forming one of their most abundant fish, and furnishing the principal supply for their tables.

An anonymous correspondent in Parbury's Oriental Herald, in 1839, stated that the Chinese had long been engaged in a trade with Calcutta in isinglass, afforded by a fish called Sulleah in Bengal, from half a pound to three-quarters of a pound being obtained from each fish. Dr. McClelland (June 1839, J. As. Soc. vol. viii. p. 203) then mentioned that the fish yielding the isinglass is *Polynemus sele*, Buch., sele or sulea of the Bengalese, common in the estuaries of the Ganges, and often found weighing from 20 to 24 pounds, and that Palogpong ikan or Ari-ari ikan of the Malays, Loo-pa of the Chinese, appears to have formed an article of exportation from the islands of the Indian Archipelago as early as they became visited by the Chinese.

Arius arius, Buch. Ham.

Pimelodus arius, B. H. | Ikan eurdudu, . MALAY.
Ikan saladu, . . MALAY.

Total length, 1 foot 10 inches. This fish inhabits the sea and estuaries of Penang, Malayan Peninsula, Singapore, Pondicherry, and Gangetic estuaries. At Penang, small individuals of this species are very numerous at all seasons. They form an article of food, and contribute more than any other of the *Siluridae* to the exportation of isinglass.

Arius militaris, L.

Silurus militaris, Linn. | *Osteogobius*, B. H.

Length, 1 foot 6 inches. Inhabits the sea and estuaries of the Malayan Peninsula, and of its islands, of Malabar, Coromandel, the Ganges, and Irawadi. Their air-vessels are preserved.

Arius truncatus, C. and V. Length, 11½ inches. Inhabits sea and estuaries of Penang, Malayan Peninsula. Its air-vessel is small, but very thick, and is transversely divided into two compartments. The fish is held in esteem by the natives, but at Penang it occurs so rarely that its air-vessel does not contribute much to the general stock of isinglass.

Capoeta macrolepidota, Kuhl. Length, 11 inches. Inhabits Penang, Java, and Tenasserim (fresh water). The air-vessel is very large, thin, white, consisting of two elongated oval portions, of which the anterior is truncated in front.

Corvina chapta, Bola chapta. The Bola inhabits the Malay coast; furnishes isinglass.

Corvina coitor, H. B., Whiting. Inhabits the estuaries of the Ganges and Irawadi. Its air-bladder makes excellent isinglass.

Johnius maculatus, Bloch., *Schneider*, var.?

Sari kulla, TAM., Russell. | *Corvina maculata*, C. and V.

Inhabits sea of Penang. The form of its air-vessel resembles that of *Johnius belengeri*.

Johnius diacanthus, Lacepede.

Lutjanus diacanthus, Lac. | *Corvina catala*, Belanger
and Bleeker.

Johnius catalans, Cuv. | *Corvina nalla katochee*,
Richardson.

Nalla katchelee, Russell. | *Katchelee*, Russell.

Sciæna maculata, C. and V. | Ikan tambarah, MALAY.

This fish grows to 2 feet 9 inches. It inhabits the seas of Penang, Malay Peninsula, Singapore, Malabar, Coromandel, Bay of Bengal, Gangetic estuaries, Tenasserim, Canton, China seas, Madura, and Java. The air-vessel, ¼ of the length of the fish, is of a broad lanceolate shape, tapering behind into a very elongated point. This fish is valuable as an article of food, and its isinglass sells in the China market at from 40 to 45 Spanish dollars per pikul.

Johnius Dussumieri, C. and V. *Corvina Dussumieri*, C. and V. Length, 6½ inches. It inhabits the Sea of Penang, the Malayan Peninsula, Singapore, and Malabar. The length of the air-vessel is about one-fourth the total length. The isinglass is reputed good, but, owing to the small size of the fish, little is procurable.

Lates heptadactylus, Lacepede.

Perca maxima, Sonnerat. | *Coius vacti*, Hem.
Holocentrus heptadactyle, | *Lates nobilis*, C. and V.,
Lacepede. | Richardson, Bleeker.

Pandoo menoo, Russell. | Ikan Siyakup, . MALAY.

This fish inhabits the sea and estuaries of Penang, Malayan Peninsula, Singapore, and Madras. It yields isinglass, of which, however, in the Straits of Malacca, but little is collected, partly on account of the comparative scarcity of the fish, and partly owing to the thinness of the air-vessel. That of a fish, when dried, weighs upwards of one ounce. At Penang, this kind sells at the rate of 25 to 30 dollars per pikul.

Lobotes erate, Cuv. and Val.

L. Farkarii, C. and V. | Ikan batu, Ikan pichat
prik, . . . MALAY.

Length, 2 feet 5 inches. It inhabits the seas of Penang, Malay Peninsula, Singapore, Java, Madura, Malabar, Ceylon, Bay of Bengal, and estuaries of the Ganges. The air-vessel is very large, about one-third of the total length, silvery white, and of a lanceolate shape. It is excessively thin, and so firmly adhering to the back, that but a small part can be removed. The isinglass is considered by the Chinese dealers to be of good

quality, but the small quantity procurable renders the fish less valuable in this respect.

Mugil cephalotus, *Cuv. and Val.*

Mugil our, *Forsknl.*

M. cephalus, *Russell.*

Boutali, *TAM., Russell.*

Sole bhanggan, *Ham.*

Jumpul, . . . *MALAY.*

Length, 2 feet. It inhabits Penang, Malayan Peninsula, Singapore, Macao, Lancavy, Chusan, Madura, Coromandel, Bay of Bengal, Gangetic estuaries, Malabar. The air-vessel is large, elongated; its parietes very thin, pearl-coloured.

Otolithus bauritus, *Cantor*, *Ikan salampre*. Total length, 3 feet. Inhabits seas of Penang, Malay Peninsula, Singapore, Lancavy, Tenasserim Province, and, according to Jerdon, the Malabar coast, where it is called Sille-kora in Malealam. The air-vessel is nearly one-half of the total length, and in shape might be compared with an elongated antique urn with two handles. From the anterior part of each of the latter proceed five branches, four of which give off smaller ones to each side, and the fifth is tortuous and smaller than the rest. It yields a large quantity of isinglass, which in the Chinese market is considered to be of the best quality, and fetches 40 to 50 Spanish dollars per pikul.

Otolithus maculatus, *Kuhl and Van Hassel*. *Jaran-gigi*, *MALAY*. The total length of this fish is 2 feet 9 inches. It inhabits the seas and estuaries of Penang, Malay Peninsula, Singapore, and Batavia. It is highly valued for the sake of its air-vessel, which yields a considerable quantity of the best kind of isinglass.

Otolithus ruber, *Bloch and Schneider*. *Jaran-gigi*, *MALAY*. Total length of this fish is 2½ feet. It inhabits the seas and estuaries of Penang, the Malay Peninsula, Singapore, Coromandel, and Malabar. The air-vessel is large, flattened, broad, lanceolate, terminating behind in a single point. The isinglass is considered very good, and sells in the Chinese market from 40 to 45 Spanish dollars per pikul.

Otolithus versicolor, *Cuv. and Val., Russell*, 109. *Panna*, *TAM*. The total length of this fish is only 6½ inches. It inhabits the sea of Penang. Its air-vessel is one-fourth of the total length. Jerdon says this fish is one foot long, and very common at Madras.

Pempheris molucca, *Cuv.* This fish grows to 3½ inches. It inhabits the seas of Penang, the Moluccas, Batavia, and Japan. Its air-vessel is large and thick.

Platax arthriticus, *Cuv. and Val.*

Ikan bonna, *Bell.*

Chæstodon arthriticus, *C. & V.*

Total length, 1 foot 7 inches. It inhabits the seas of Penang, Sumatra, Java, and Singapore. The flavour is excellent, but the large air-vessel is too thin, and yields too little isinglass to become of value.

Polynemus heptadactylus. Total length, 4½ inches. Inhabits Penang, Batavia, Cheribon, and Samarang.

Polynemus indicus, *Shaw, Roe Ball.*

P. sele, *Buchanan.*

P. uronemus, *C. and V.*

P. plotus, *M'Clelland.*

P. lineatus, *M'Clelland.*

P. gelatinosus, *M'Clelland.*

Lukway, . . . *ARAKAN.*

Ka-tha, . . . *BURM.*

Ikan kurow, . . . *MALAY.*

Walan kala, . . . *TAM.*

Total length, 3 feet. It inhabits the seas of Penang, Singapore, Malay Peninsula, Sourabaya, estuaries of the Ganges, Vizagapatam, Madras,

and Pondicherry. The air-vessel is silvery, its membrane thick, the general form oval. It occupies the whole length of the abdomen, terminating behind in a very sharp point, which penetrates the thick of the tail over the first interspinal of the anal. At Penang single individuals occur at all seasons; but numbers are taken from June to August. The weight is commonly from 4 to 6 lbs., seldom exceeding 20 lbs. The air-vessel of a good-sized fish, when dried and ready for the market in China, weighs upwards of 2 oz., is considered very good isinglass, and fetches 25 to 30 dollars per pikul. The fish itself is valued as an article of food, though less so than *P. tetradactylus*. Mr. O'Riley estimated that 2000 lbs. of isinglass from this fish might be obtained annually off Amherst alone. Mr. Blundell said that the largest sounds were exported from Rangoon, and that they sell there at about 8 annas a pound. Major Bogle wrote that about 10,000 of the fish, large and small, were taken annually in Arakan, and that the sounds sold there for about 5 annas per pound to the Chinese, who exported them to Penang, where they are said to bring more than a rupee a pound.

Polynemus plebius, *Broussonet, L., C. and V.*

P. lineatus, *Lacpede.*

P. niloticus, *Shaw.*

P. Commersonii, *Shaw.*

Bynni, *Bruce.*

Pole kala, . . . *TAM.*

Length, 4 feet. It inhabits the Coromandel coast, Otaheite, Isle of France, and Isle of Tanna. Its value as a fish yielding isinglass unknown.

Pristipoma hasta and *Pristipoma olivaceum*, of the family Percidae, are common round the coasts of India, and their air-bladders are largely exported to China.

Umbrina Russellii, *C. and V., Richardson.*

Ikan gulama, . . . *MALAY.* | *Qualar katcheelee*, . . . *TAM.*

Total length, 6 inches to 1 foot. Inhabits seas of Penang, Malay Peninsula, Singapore, Vizagapatam, Indian and China seas. Its isinglass is considered of good quality.—*Russell.*

The Indian isinglass is not prepared with anything like sufficient care to obtain a place in the markets of Europe. Good isinglass cannot be made without considerable attention being paid during the processes of washing, beating, scraping, and drying, all of which have a very important influence on the goodness of the finished isinglass. The imperfect solubility of some, and more especially of the thick pieces, is occasioned by the presence of a considerable quantity of albumen, or insoluble membranous matter having most of the properties of albumen, which is not only itself insoluble, but in addition renders much of the gelatine with which it is associated likewise insoluble. It is more than probable that the greater part of this albuminous substance might be readily removed by sufficiently scraping the isinglass during its preparation. Attention should also be directed to the process of drying, as, if not properly dried, it might possibly undergo a slight change or decomposition, and become partially converted into a more insoluble form of gelatine. A more important objection is the smell, which, however, may likewise, to some extent, be traced to the preparation. Much greater care is bestowed on the preparation in Russia than in India. Boiling with fresh-made charcoal would probably have the effect of depriving inferior isinglass of some of the smell and colouring matter when required for the purposes

of a jelly. Isinglass cut into threads is unsuitable for the English commerce, notwithstanding that isinglass for retail is cut into fine threads, as more convenient for general use, and for making jellies and soups, in consequence of the extensive surface which is exposed rendering it more easily and quickly soluble. But there is a great prejudice in the wholesale market to buying things in a cut or powdered state, in consequence of the innumerable methods adopted for falsifying and adulterating almost every drug. Machinery is used in London for cutting the isinglass into threads of any degree of fineness; and as it is impracticable at present to rival this in India, besides having to contend against prejudice if sent in this state, it is preferable, and will be cheaper, to prepare the article and send it as sheet isinglass, that is, the form of the slit sounds themselves, or their purest membrane, washed, cleaned, and dried in the best manner. The Indian isinglass, as at present prepared, is complained of as too thick if intended to come into competition with the superior varieties of Russian isinglass. Some of it may, without difficulty, be rendered thinner, for even in the dried state, layers of membrane which display a fibrous structure may be stripped off, and which no doubt contain the greater portion of the insoluble albumen. It might also be made thinner by beating, or pressing between iron rollers or marble slabs, as is done with American and some kinds of Brazilian isinglass. The extra labour which this would require might be profitably saved, by not tearing it into fibres, in which state it is disapproved of in the market; but it might still be cut or rasped into a state fit for domestic use. The refuse should be turned to account; the soluble parts of the sounds separated from the insoluble, and poured out into thin plates, and dried on nets, as is done with some of the gelatine of commerce. In order to ascertain the value of the article (merely stripped of all impurities calculated to injure its quality, without any regard to appearance), a considerable quantity was sent to England by Dr. McClelland. From the account received of the sale, it appears that this isinglass realized only 1s. 7d. per pound, which was considerably under its prime cost.—*Dr. Royle on Isinglass*, p. 11; *Cantor, Malayan Fishes in J. B. As. Soc.*; *Mason's Tenasserim*; *Dr. Day on the Air-bladder of Fishes*; *Jerdon, Fishes*.

ISIS, a goddess of the Egyptians. Macrobius tells us that Isis is worshipped in every religion, being either the earth or universal nature, under the influence of the sun. For this reason the whole body of the goddess is covered with breasts (in this respect resembling the Diana multomamma of Ephesus), because the universe is nourished by the earth of nature. Over the door of the minor temple of this deity at Pompeii, are wreaths of lingam and yoni.—*Milner's Seven Churches*, p. 79; *Tod's Rajasthan*. See Cumbha; Gauri; Isani.

ISKARDO or Skardo, principal town of Balti state, Kashmir, in lat. 35° 12' N., and long. 75° 35' E. It is on a plain 7700 feet above sea-level, at the bottom of a valley surrounded by lofty mountains. The fort occupies a rock of gneiss at the confluence of the Indus with its great tributary the Singpar.

Balistan or Balti (called by British geographers Little Tibet), is a country a good deal

to the north-east of Kashmir, and north-west of Ladakh. Gilgit, conquered by Gulab Singh, is to the west-north-west of Iskardo. The Chorbhat district is a dependency of the government of Iskardo, which, like that of Leh, is subject to Kashmir. The desert country by which Nubra and Chorbhat are separated, has, for the present, acted as a barrier to the further extension eastward of the Muhammadan religion, which is now universally that of the people of the whole of Iskardo (or Balti) district, as well as of Dras. On the Indus, and in the valley south of it, there is no uninhabited tract between the two, so that the Muhammadan and Buddhist populations are in direct contact. The result is, that Muhammadanism is in that part gradually, though very slowly, extending to the eastward. Iskardo is a Muhammadan corruption of the Tibetan name Skardo, or Kardo, as it is very commonly pronounced. The mountains which surround the Iskardo plain rise at once with great abruptness, and are very steep and bare. The houses of Iskardo are very much scattered over a large extent of surface, so that there is no appearance of a town.—*Thomson's Tr.* pp. 204-219; *Mrs. Hervey's Tartary*, i. p. 213.

ISLAM, the Muhammadan name of the Muhammadan religion, derived from the Arabic verb Salm, he gave safety; other parts of the verb being in use, as salam, taslim, salūmat, muslim. Its followers style themselves müsalmān, the Arabic plural of muslim; and in India, muslim or nao muslim, lit. new saved, is applied to all converts. They also call themselves Muhammadi, also Momin, and style their faith the Din-i-Islam, the saving faith.

Islam is the name that was given to the Muhammadan religion by its founder. Surat-ul-Imran, verses 78, 79, says it is the belief in God, and in what was sent down to Abraham, Ishmael, Isaac, Jacob, and the tribes, and given to Moses, Jesus, and the prophets from their Lord.

The followers claim for it to be regarded as the true faith, comprising obedience to the will of God, submission, humbling one's self. Their sacred book, the Koran, is the foundation of the laws and religion of the Muhammadans. The Shaikh-ul-Islam is the chief legislator and jurist of the Turkish empire. Ahl-ul-Islam are the people of the faith.

The doctrine is termed Islam. Faith is termed Iman, and religion, in its practical sense, Din. Muhammadanism enforces the dogma of unity in creed, by the phrase 'ul-Islam malleti wahidun,' All Islamites are one nation. Islamism is regarded by the Jews as the second great heresy of their faith.—*Cal. Rev.*, Feb. p. 387; *Malcolm's Persia*, ii. p. 322.

ISLAMABAD is the ancient capital of Kashmir. Five miles to its west is the temple of Martand. It is built on the Jhelum, and is the seat of the shawl manufacture.

ISM. ARAB. A name or attribute. In exorcism, amongst Muhammadans, certain names (Ism, sing.; Isma, pl.) are used, such as the Ism-jallali, or fiery or terrible attribute of the deity, also the Ism-jamali, the watery or air or amiable attribute, and with these they pretend to cast out devils, and command the presence of genii and demons. Ism-i-Azam is the great attribute of the deity. Ism, a noun; Ism-u-nisbah, an adjective; Asma, plural, names or attributes of God.

ISMAIL, called Samani, a Turk, the founder

of the Samani dynasty, A.D. 862. He conquered Transoxiana, Khorasan, and Afghanistan, and fixed the seat of his government at Bokhara. The Samani dynasty ruled for 120 years. It was the fifth of this dynasty who possessed a Tartar slave named Alaptagin, who was made governor of Ghazni and Kandahar, and on the death of his patron assumed independence. Alaptagin was succeeded, A.D. 970, by his purchased Turki slave Sabaktagin.

ISMAIL, the first king of the Suffavean race, ascended the throne of Persia in A.D. 1499, and proclaimed the Shiah faith to be the national religion of that country.

ISMAIL, son of Jafar Sadaq, was the seventh Imam of the Shiah Muhammadans. The Shiah sect look on Ali as the first rightful leader of the Muhammadans, and say that from him and his wife Fatima, Mahomed's daughter, have alone sprung the rightful heirs to the Imāmat. In this view, Abubakr, Umar, and Othman, who preceded Ali, and Muāwiyah, the fifth khalif, and his son Yezid, are all alike regarded as usurpers. Ali, Hasan, and Husain were first, second, and third. Jafar, the sixth of the Shiah Imams, was a man of superior sanctity, wisdom, and learning. He was the author of the Book of Faith which is still in use. A tradition exists that he did not die, and will reappear. His son Ismail was, during his lifetime, nominated his successor, but, dying before his father, and leaving none but young children, his half-brother Musa Kasim, whose mother was a slave, was elected to the Imāmat. Musa's son Ali was eighth Imam; Muhammad-bin-Ali was ninth; Ali, son of Muhammad, tenth; Hasan, the eleventh, was poisoned, and his son Muhammad, born A.H. 255 at Sermenrai, and who was a mere infant at his father's death, was his successor, but disappeared mysteriously at the age of twelve years. According to a legend, he entered a cave at Sermenrai, near Baghdad. On the accession of Musa Kasim, many of Ismail's followers espoused the cause of his children, and formed a sect, who became notorious in history as the Assassins, their ruler being styled the Shaikh-ul-Jabl, or Old Man of the Mountain, whose fortress was Alamut; but with the defeat of Kahir Shah, Aja-ud-Din's son, the demolition of his strongholds, and the slaughter of over 12,000 of his adherents by Hulak, the power of the Ismaili family came to an end.

ISMAIL ABULFADA, Prince of Hamah in Syria, A.H. 733, which was translated by John Gagnier, Professor of Arabic at Oxford, A.D. 1723, and into English by the Rev. W. Murray, Episcopal clergyman at Duffus in Scotland.

ISMAILI, also Ismailiah, are Shiah sectarians, who take their name from the Imam Ismail, son of the Imam Jafar Sadaq. In Bombay they are known as the Khoja sect. The Ismaili are the sect of the chief known to the Crusaders as the Old Man of the Mountain, the Shaikh-ul-Jabl. The sect in its original form was a branch of the Shiah, but was called Ismailian, from Ismail, the eldest son of the sixth Imam, whom they recognised as his father's successor in opposition to the mass of the Shiahs. Their doctrine took the form of a sort of gnosticism, giving a non-natural sense to all revelation, from which they had the name also of Bathenians, from Batin, ARAB., within, a word signifying esoteric. Hasan Sabah, son of an Arab at Rai, one of their converts

in Persia, put himself at the head of the sect in that country, and about A.D. 1090 made himself master of the mountainous part of Irak Ajami, immediately south of the Caspian. This region included many strong castles, and at one time the power of his successors extended to the gates of Isfahan. From its character the country was called by the Arabs Balad-ul-Jabl, the hill country, and hence the chief's title. This was also applied to the head of a branch society which had its seat in Syria, and became well known to the Crusaders. The name of Assassin has been by many supposed to be derived from Hashish, the hemp drug, under the influence of which the emissaries of the society are imagined to have acted, but it is more probably obtainable from Hasan Sabah, hence al-Hasani.

In the western side of India, members of the Ismaili sect are designated Khoja, about 1400 families in and around Bombay, 5000 in Kattyawar, 3000 in Sind, and 800 or 900 in Zanzibar. They are descendants of converted Hindus of Sind, who about 400 years ago were won over by Pir Surd-u-Din, a Dai of the Ismaili.

Aga Khan, a chief of one of the branches, claiming indeed to be a descendant from or the representative or incarnation of Ali, died, aged eighty-one, at Bombay, in April 1881. He had failed in an attempt to obtain the kingdom of Persia, and returned to India, where he obtained fees from all his sect from Zanzibar to Central Asia. The Khoja sect of Bombay alone gave him a lakh of rupees a year, and the Government of Bombay allowed him 12,000 rupees annually, for services rendered during the Afghan war of 1842. His son has since been recognised as his successor.—*Malcolm's Persia*, i. p. 347; *D'Osson*, book iv. ch. iv.; *Yule, Cathay*, i. p. 154.

ISOETES COROMANDELINA. Linn.

Ghi-ka-gadda, . . . DUKH. | Gitti gadda, . . . TEL.
Nechatty kalangu, . . . TAM.

Found in great abundance along the edges of tanks in the Karnatic. The tender white shoots immediately above the spore-bearing involucre are a favourite article of diet, and are sold commonly in the bazars after the monsoon.

ISONANDRA, a genus of plants belonging to the natural order Sapotaceæ. The genus consists of large trees growing in Ceylon, and in the two Peninsulas of India. Dr. Wight, in *Icones*, has *I. candolleana*, lanceolata, percha, *Perottetiana*, polyandra, and villosa. In Ceylon, *I. canaliculata*, *Thw.*, is a middle-sized tree in the Cultura district; *I. grandis*, *Thw.*, a large tree of the Central Provinces and Saffragam districts, from the seeds of which an oil is extracted, and which is used similarly to that of the *Bassia longifolia*. *I. lævifolia*, *Thw.*, is a moderate-sized tree of the Saffragam district of Ceylon and at Reigam Corle. *I. pauciflora*, *Thw.*, is a moderate-sized tree at Ratnapura, in Ceylon. *I. obovata*, *Griffith*, is an evergreen tree of Tenasserim, yielding a sort of gutta-percha. *I. rubiginosa*, *Thw.*, is a large tree of the Saffragam district and Hinidun Corle, in Ceylon, growing up to an elevation of 4000 feet.—*W. Ic.*; *Thw. Zeyl.*

ISONANDRA ACUMINATA. Lindl.

Isonandra Cullenii, *Drury*. | *B. elliptica*, *Dalziel.*

Bassia acuminata, *Bedd.*

Indian gutta tree, ENG. | Pashonti, . . . MALARAL.
Pachonti, . . . MALARAL. | Pali, . . . TAM.

Grows in the forests of Coorg, the Wynad, Travancore, and in the Annamallay mountains. It attains a height of 80 or 90 feet, and furnishes a good wood, and capable of receiving a good polish. It exudes from the trunk a substance having similar characters to the gutta-percha of commerce; this is procured by tapping, but the tree requires an interval of rest of some hours, or even of days, after frequent incision. In five or six hours, upwards of 1½ lbs. was collected from four or five incisions in the tree. When fresh, this is of a milk colour, the larger lumps having a dull-red colour. The gum is hard and brittle at the ordinary temperature, but becomes sticky and viscid on the increase of heat, such as that from friction in a mortar; and when this condition is reached, it does not, until after the lapse of several days, resume its original consistence. Boiled with water it becomes of a reddish-brown colour, rendering the water turbid and slightly saponaceous. With some chemical re-agents, the behaviour of the gum was exactly like that of the gutta-percha, while with others only a slight similarity was observed. After solution in naphtha or turpentine, gutta-percha resumes its original condition, but the pachonta continues viscid and sticky, and if again much cooled becomes brittle and friable as at first. It is not found applicable to all the purposes for which gutta-percha is used, but 20 to 30 per cent. of it may be mixed with gutta-percha, without destroying the qualities of the gutta.—*Surgeon-General Balfour in Report of Madras Government, Central Museum; Madras Conservator's Report, 1858, p. 6; Year Book of Facts.*

ISONANDRA GUTTA. *Hook.*

Didropeia gutta, Benth. Gutta-percha tree, . ENG.
Mazer wood tree, . ENG. Taban, Ninto, . MALAT.

The gutta-percha tree is a native of the Malay Archipelago, Sumatra, and Borneo. In 1842 the discovery was made that its gum was suited for an infinite number of applications; and now there is scarcely any vegetable product more extensively useful, or one more generally sought after for mercantile purposes. Dr. Montgomerie observed in the hands of a Malay woodsman at Singapore, the handle of a parang, made of a substance quite new to him, and which he found could be moulded into any form, by simply dipping it in boiling water until it was heated throughout, when it became plastic as clay, and when cold regained, unchanged, its original hardness and rigidity. Dr. Montgomerie transmitted specimens of this substance to England on the 1st March 1843, and received the gold medal of the Society of Arts for its introduction, 'as a new and hitherto unknown substance, likely to be useful for various purposes in the arts.'

Gutta-percha, in its crude state, differs in many particulars from caoutchouc; it is of a pale-yellowish, or rather dirty white colour; it is contained in the sap and milky juice, which quickly coagulates on exposure to the air,—from 20 to 30 lbs. being the average produce of one tree. For collecting the sap, the trees are felled, barked, and left dry and useless. Hence forests are soon cleared of the gutta trees, whereas it is believed that a constant and moderate supply might be secured by incisions in the bark, as in the case of caoutchouc. The gutta is received in blocks, or in rolls of thin layers, being, in the first place,

freed from impurities by kneading in hot water, when it is left soft, plastic, and of a whitish grey. When thus prepared, the gutta has many curious properties. Below the temperature of fifty degrees it is as hard as wood, but it will receive an indentation from the finger nail. When softened in hot water, it may easily be cut and moulded, and it will harden, as it cools, to its former rigidity; and it may be softened and hardened any number of times, without injury to the material. Unlike caoutchouc, it has little elasticity, but it has such tenacity, that a slip one-eighth of an inch substance sustained 42 lbs. weight, and only broke with a pressure of 56 lbs. When drawn out, it remains without contracting. It has been made subservient to the manufacture of tubings, mouldings for picture-frames, catheters and other surgical instruments, whips, thongs, cricket balls, driving bands or straps for mechanic purposes, soles for boots and shoes; in solution, also, like caoutchouc, for waterproofing cloth. It is likewise employed in mastics, cements, and is burnt and made into printing ink and paint.—*Tomlinson; Cat. Exhib., 1862.*

ISONANDRA WIGHTIANA. *A. D. C.*

I. Perottetiana, A. D. C. | *I. lanceolata, W. Ic.*
I. Candolleana, W. Ic. | *Kiriwarala gass, . SINGH.*

A moderate-sized Ceylon tree and of the Western Ghats. One variety is extremely abundant at an elevation of 2000 to 5000 feet, another variety grows near Galagama, and a third variety is at Newera Ellia.—*Thw. Zeyl.*

ISORA CORYLIFOLIA. *Sch. and End.*

Helioteres isora, Linn. | *H. Roxburghii, Rheede.*
Antumora, . . . BENG. | *Valumpiri, . . . MALEAL.*
Thu-nay-khyas, . BURM. | *Valambiri kaya, . TEL.*
Indian screw plant, ENG. | *Nuliti; Syamall, . . .*
Marori, . . . HIND. | *Kavanchi, . . . "*
Isora Marri, . . . MALEAL.

Good white fibres, called Googul in Tamil, are obtained from its bark, and are made into excellent ropes; various parts of this plant are employed in medicine; its wood is employed to obtain fire by friction.—*Mad. Ex. Jur. Rep.*

ISPAND. *PERS.* The seed of the *Lawsonia inermis*, in Persia burnt at marriages.

ISPRINJI, a town of Baluchistan, occupied exclusively by the Bangolzi Baluch, who also spread into Shal and Mustang, and in winter repair to Tali, near Lehri.

ISPRUK, a coarse powder made from a species of *Delphinium*, growing in Afghanistan; used in dyeing.—*Simmonds' Dict.*

ISRAFIL, according to Muhammadan belief, the angel who will sound the trumpet at the last day.

ISREE, a cotton fabric. Vizagapatam Isree, Nellore white Percalah, and Jyempettah Soocoy are of accurate workmanship.—*Jur. Rep. M. E.*

ISSYKOL LAKE, in parts is 5000 feet above the sea. It is 300 versts in length, and 50 in breadth. Bones are found there, and submerged ruins and statues of men and women.

ISTAKHR, an isolated hill north-west of Persepolis, having a fort which seems to have served as a state prison. This isolated hill is the key of the pass which opens into the plain of Persepolis, from the hilly country of Ardekan. Istakhr or Persepolis was always a favoured spot with the ancients. It was the cradle of the Ahmed race, and it was in its vicinity that Yezdejird, on his return from Khorasan, placed himself for the

last time at the head of his subjects, and was defeated by Abdullah, son of Omar, A.D. 650. The Sharf Namah, a History of Kurdistan, represents the castle of Istakhr as a state prison in which Ahmed was confined during the space of ten years. Among the celebrities of Istakhr may be mentioned Mazdac, who propagated the doctrine of the community of women, which in the early part of the 19th century was renewed by the Saint Simonians. Mazdac was a native of that town, and flourished in the reign of the Kaianian monarch Kobad, in the 6th century of the Christian era.—*Ouseley's Tr.* ii. 404; *De Bode's Tr.* 165.

ISTALIF, a town in the Koh-i-Daman of Kabul, 20 miles W.N.W. of Kabul. The inhabitants are Tajak; they are turbulent and vindictive, but are deemed the best foot soldiers in Afghanistan. It was carried by assault by the troops under Sir John M'Caskill on the 29th September 1842, and totally destroyed. It is one of the most picturesque spots which can be conceived; all that a combination of natural beauties can achieve are beheld here in perfection. The hills produce good pasture. The houses are erected along the skirt of the mountain. Near this place is a beautiful village called Istarghich, on the way to Charikar. This latter place is larger than any other town in the valley, but is not handsome.—*Mohun Lal's Tr.* p. 560; *Masson's Journeys*, iii. p. 120; *MacGregor*, pp. 392, 393.

ISTAQBAL. ARAB. The Muhammadan courtesy of advancing to receive a distinguished guest. A deputation is usually sent forward to meet, welcome, and conduct to the lodgings prepared for him, any stranger or guest to whom it is designed to pay high respect; and the more numerous and higher in rank the persons of whom this deputation is composed, the greater is the honour conferred. In the courtesies of Muhammadans, a host advances to receive a visitor, and on his departure conveys him (murajüt) to the same spot.—*Fraser's Khurasan*.

ISTAWA. ARAB. In the Bombay revenue accounts, the land rent levied at progressively increased rates, until it reaches the full sum impossible on land brought into cultivation.—*Wilson*.

ISTIMRAR. ARAB., HIND., TEL. Land granted in perpetuity at a stipulated rent.—*W.*

ISTIOPHORUS GLADIUS, the flying sword-fish of the Cape, has a large dorsal fin.—*Hart*.

ISWARA. SANSK. Lord, master; but is a designation by Hindus of the particular god, Brahma, Vishnu, or Siva, whom they may regard as the Supreme Being. Generally, however, in Southern India, it is accepted as applied to Siva, who is also called Maha-deva. Colonel Tod sees the Osiris of Egypt in the Iswara of India.

ISWARA. In Hindu astronomy, the 11th year of the cycle of Jupiter.

ITALY, a country in the south of Europe, its southern shores washed by the Mediterranean Sea and the Gulf of Venice. Its chief cities are Rome, Milan, Florence, and Turin. The old Italic languages comprehended the Latin, Umbrian, Oscan, and Sicilian. The modern Italian is an offshoot from Latin; it is remarkable for its smoothness, and is spoken in its greatest purity at Florence. In 1881-82, Italy sent to India merchandise to the value of Rs. 52,44,334, and received Indian produce of value Rs. 3,10,23,810.

ITIHASA. SANSK. Epic poems of the Hindus, as the Ramayana and the Mahabharata legends of heroes, some of them pictured to have been related by Bhima-sena, as he lay wounded on the field of battle.—*Dousson*; *Growse*.

ITO, a tree of Tahiti, furnishing a strong, heavy timber, used for posts and the framework of houses.

ITR. HIND. Also written Atr, Otto, and Attar, any strong-scented essential oil.

ITZABU, a square silver coin of Japan, worth about 1s. 6d. or 1s. 8d. It is the common coin of Japan by which prices are fixed.

IVES, EDWARD. A medical officer of the British Navy, who wrote a *Voyage from England to India in 1754*, and an *Historical Narrative of the Operations of the Army in India under Admiral Watson and Colonel Clive*, Lond. 1773.

IVORY.

Sin-ul-fil,	ARAB.	Hat'hi dant,	HIND.
Siang-pi, Siang-ya,	CHIN.	Ebure,	IT.
Filsben,	DAN.	Gading danta,	MALAY.
Elpenbeen,	DUT.	Dandan-i-fel,	PERS.
Ivoor,		Marfim,	PORT.
Ivorie,	FR.	Slonovaza kost,	RUS.
Elfenbein,	GER.	Danta,	SANSK.
Elephas,	GR.	Filbein,	SW.
Karnoth-shen,	HEB.	Dantan,	TAM.
Shen-habbin,		Dantamu,	TEL.

Ivory is mentioned in Homer and Hesiod. The great throne of Solomon was made of ivory (1 Kings x. 18-20, xxii. 39; 2 Chronicles ix. 17-19; Canticles vii. 4). The ivory of commerce is obtained from the tusks and teeth of the elephant, the narwhal, the walrus, and the hippopotamus. The best and largest supply is, however, from the elephant, and that of the slain elephant is preferred. The male elephant, when full grown, has two tusks, varying very greatly in size in different animals, but most valued when they are large, straight, and light in colour. These tusks are hollow at their insertion into the jaw, and for a considerable space therefrom, but become solid as they taper towards the extremity. The principal sources whence they are obtained are the western coast of Africa and the E. Indies; but the African tusks are most esteemed, as being denser in texture, and less liable to turn yellow. By an analysis, the African show a proportion of animal to earthly matter of 101 parts to 100; while in the Indian it is 76 to 100.

Unmanufactured Ivory.

	Imported.		Exported.	
	Lbs.	Value, Rs.	Lbs.	Value, Rs.
1874-75,	567,214	12,11,517	8,288	39,183
1875-76,	568,588	22,92,471	12,300	59,473
1876-77,	546,769	24,15,314	10,731	52,566
1877-78,	456,662	19,39,549	11,211	56,653
1878-79,	405,988	16,73,742	12,148	57,458
1879-80,	431,740	17,92,609	12,255	55,624
1880-81,	471,689	20,54,332	9,194	43,970
1881-82,	511,829	21,89,672	9,994	50,046

The largest pair of elephant's tusks sent to the 1851 Exhibition weighed 138 lbs.; they were obtained from a wild elephant killed in the Travancore forests. One tusk weighed 71 lbs., the other 67 lbs., and showed a fine white compact kind of ivory; of these two, one measured 6 feet 8 inches in length, and the other 6 feet 6 inches, the circumference at the base being 17 inches in each case. The domestication of the elephant is usually attended by deterioration of

the length and quantity of the ivory. At Zanzibar, and on the east coast of Africa, tusks weighing 100 lbs. each are common; those of 175 lbs. are not rare, and a pair has been seen whose joint weight was 560 lbs.

The tusks of the hippopotamus afford a very hard and white ivory. These are usually short and much curved, hollow at the place of insertion, and covered with a glossy enamel. They vary in weight from 3 or 4 to 30 lbs. These are highly prized by the dentists, and are better adapted than any other ivory for making artificial teeth. The thick coat of enamel which covers them has first to be removed, for this entirely resists steel tools, and under it is found a pure white ivory, with a slight bluish cast. The parts rejected by the dentists are used for small carved and turned works.

The horn or tooth of the narwhal is also hard and susceptible of a fine polish. The largest size is 10 feet long; at the lower extremity it forms a slender cone of a twisted or spiral figure.

Fossil ivory at one time supplied almost the whole of the ivory-turner's work made in Russia. Along the banks of the larger rivers of Further Siberia, thousands of tusks were annually dug up, which once constituted the weapons of defence of a species of mammoth now extinct. Their substance was as well adapted for use as the ivory procured from living species. One measured 10 feet in length, and was solid to within 6 inches of the root, weighing no less than 186 lbs.; this was cut up into keys for pianofortes. African ivory, when first cut, is mellow, warm, and transparent, almost as if soaked in oil, and with very little appearance of grain or fibre; the oil dries considerably by exposure, and a permanent tint then remains, a few shades darker than writing paper. Asiatic ivory is more dead-white at first, but is more disposed of the two to turn yellow afterwards. Ivory is brought to China, principally from Cochinchina, and from Africa via Bombay, and always finds a ready sale at Canton; the largest and best tusks weigh from 16 to 25 lbs. each, decreasing to 5 or 6 lbs. The cuttings and fragments also form an article of trade, as the workmen can employ the smallest pieces. Bones and horns, especially the long horns of buffaloes, are in China worked into handles, buttons, etc. Rhinoceros' horns are taken from Burma, from Sumatra, and from Africa through Bombay; they are highly valued by the Chinese, from a notion that cups made from them sweat whenever a poisonous mixture is poured into them. A perfect horn sometimes sells as high as 300 dols., but those that come from Africa do not usually rate above 30 or 40 dols. each. The principal use of these horns is in medicine and for amulets, for only one good cup can be carved from the end of each horn; and consequently the parings and fragments are all preserved. The hard teeth of the walrus, lamantin, and other cetaceous animals also form an article of import into China from the Pacific, under the designation of sea-horse teeth; they weigh 1 or 2 lbs. a-piece, and the ivory is nearly as compact, though not so white, as that of the elephant.

Ivory of the teeth of the sperm whale is hard, heavy, elegantly marked, and takes a good polish, but is somewhat variable in quality, and often deficient in purity of colour.—*F. D. Bennett, p.*

11; *Tomlinson; Holtzapfel; Hon. Mr. Morrison's Compendious Description; Madras Exhibition Juries' Rep.*

IVORY CARVINGS of different parts of India are admired for the elaborateness of detail and for the truth of representation. A set of chessmen from Berhampur at the Exhibition of 1851, carved from the drawings in Layard's *Nineveh*, were excellent representations of what the workmen could only have seen in the above work, and showed that they are capable of doing new things when required; their representations of an elephant and other animals were true to nature. At the Madras Exhibition of 1855, a very interesting and complete series of carvings in ivory was exhibited by the raja of Travancore. It comprised many of the common animals, reptiles, fruits, and flowers of the country, all carved with taste, and carefully finished. There was a good deal of grace and spirit in the action of the animals, some of which were in natural attitudes, particularly a bull and cow, two deer, a cheeta, and a rabbit. A frog and lizard were well represented, and a pair of paper-cutters with ornamental handles were particularly deserving of notice, one for the judicious adaptation of a common garden flower to the design, and the other of a lizard in a spirited attitude. The whole series evinced a perception of the natural beauties of the objects represented. The delicate carving of Chinese workmen is well known. Few products of their skill are more remarkable than the balls, containing ten or twelve spheres cut out one within another. The manner of cutting these is simple. A piece of ivory or wood is first made perfectly globular, and then several conical holes are bored into it in such a manner that their apices all meet at the centre, which is usually hollowed out an inch or less after the holes are bored. A long crooked tool is then inserted in one of the conical holes, so bent at the end and stoppered on the shaft that it cuts the ivory at the same distance from the surface when its edge is applied to the insides of the cone. By successively cutting a little on the insides of each conical hole, their incisures meet, and a sphericle is at last detached, which is now turned over and its faces one after another brought opposite the largest hole, and firmly secured by wedges in the other holes, while its surfaces are smoothed and carved. When the central sphere is done, a similar knife, somewhat larger, is again introduced into the holes, and another sphere detached and smoothed in the same way, and then another, until the whole are completed, each being polished and carved before the next outer one is commenced. Fans and card-cases are carved of wood, ivory, and mother-of-pearl in alto-relievo, with an elaborateness which shows the great skill and patience of the workmen, but at the same time his bad taste in drawing, the figures, houses, trees, and other objects being grouped in violation of all propriety and perspective. Beautiful ornaments are made by carving roots of plants, branches, gnarled knots, etc., into fantastic groups of birds or animals, the artist taking advantage of the natural form of his materials. Models of pagodas, boats, and houses are also entirely constructed of ivory, even to representing the ornamental roofs, the men working at the oar, and women looking from the balconies. Baskets of elegant shape are

woven from ivory splinths; and seals, paper-knives, chessmen, counters, combs, etc., exceeding in finish and delicacy the same kind of work found anywhere else in the world. The most elaborate coat of arms, or complicated cypher, can also be imitated by these skillful carvers. The national taste prefers this style of carving on plane surfaces; it is seen on the walls of houses and granite slabs of fences, the woodwork of boats and shops, and on articles of furniture. Some of it is pretty, but the disproportion and cramped position of the figures detract from its beauty. When bones are subjected to the action of hydrochloric acid, the phosphate of lime, which forms one of their component parts, is extracted, and thus bones retain their original form, and acquire great flexibility. In the course of drying, the ivory returns to its original hardness, but its flexibility can be easily restored by surrounding it with wet linen, or by placing wet sponges in the cavities of the pieces. The decay of articles in ivory can be effectually checked, even when its progress has advanced so far as to cause the specimens to crumble away under the hands. Some of the works in ivory forwarded by Mr. Layard from Nineveh, were found on their arrival in England to be in a state of rapid decomposition. Professor Owen was consulted on the subject, and he suggested a remedy, which has proved entirely successful, thereby preserving to this country these curious relics of ancient art. Concluding that the decay was owing to the loss of gelatine in the ivory, he recommended that the articles should be boiled in a solution of gelatine. Under this process they became apparently as firm and solid as when they were originally entombed.—*Williams' Middle Kingdom; Yule's Embassy; Hodgson's Nagasaki; Hon. Mr. Morrison's Compendious Description; Mad. Ex. Jur. Rep. Sec Carving.*

IVORY PALMS.

Palme de marfil. . SPAN. | *Homera, Indians of PERU.*
Tugua, Indians of DARIEN. | *Pullipunta* . . .

The ivory palms are the *Phytelephas macrocarpa* and *P. microcarpa*, trees of S. America, between lat. 9° N. and 8° S., and long. 70° to 79° W., inhabiting damp valleys, banks of rivers, and rivulets on the lower coast region in Darien, and on mountains 3000 feet above the sea in Ocana, growing generally in separate groves, seldom intermixed with other trees or shrubs. The fruit, a collection of from six to seven drupes, forms clusters which are as large as a man's head, and stand at first erect, but when approaching maturity, its weight increasing, and the leaf-stalk which had up to that period supported the bulky mass having rotted away, it hangs down. A plant bears at one time from six to eight of these heads, each weighing when ripe about twenty-five pounds. The drupes are covered outside with hard woody protuberances. Vegetable ivory was exported chiefly from the river Magdalena, and in some years no less than 150 tons of it were imported into England. The Indians employ the leaves of this most beautiful palm as a covering to their cottages. The fruit at first contains a clear insipid fluid, with which travellers quench their thirst; this fluid afterwards becomes gradually sweet and milky, and at length acquires solidity, so as to be as hard as ivory. If the fruit be gathered while the juice is fluid, the latter soon becomes acid;

but when allowed to attain perfection, the kernels are of sufficient hardness to be employed by the Indians as knobs for walking-sticks, reels of spindles, and little toys, which are white, and perfectly hard while dry; if they are put under water they soften, but on drying, their hardness is restored. Bears eagerly devour the young fruit. The vegetable ivory is, in fact, the albumen surrounding the embryo, and which in some other palms, as the coconut palm, constitutes a beautiful and firm substance lining the shell. This useful plant might be introduced into India.—*Seeman in Botanical Magazine*, May 1856, p. 192.

IXORA, a genus of plants belonging to the tribe Cinchonaceæ, and the genus is so named, it is supposed, from the Hindu god Iswara. They form shrubs or small trees, with opposite leaves, and stipules arising from a broad base, but acute at the apex. The species are numerous, and chiefly confined to India and the Eastern Archipelago.

IXORA BANDHUCA. *Roxb. Jungle geranium.*

Bandhooka. . . . HIND. | *Buckolee.* . . . HIND.
Kuktaka.

A spreading shrub, smaller than *I. coccinea*, but equally common; in flower almost during the whole year; of a pale crimson colour. In the Kotah gardens and jungles it is a beautiful bush, covered with numerous scarlet flowers all the year, and would be very ornamental.

IXORA COCCINEA. *L. Flame of the forest.*

I. grandiflora, R. Br.

Pan-sa-yeik. . . . BURM. | *Thetti.* . . . TAM.
Shetti. . . . MALEAL.

This species of *Ixora* is sometimes called by the European residents of Tenasserim, the country geranium.

IXORA PARVIFLORA. *Vahl. Torch tree.*

I. alba, Roxb. | *Webera corymbosa, Sm.*
I. pavetta, Andr. | *Herb.*
I. decipiens, D. C.

Henna gorivi. . . . CAN. | *Shulundu.* . . . TAM.
Gandbul? . . . HIND. | *Karang cottay.* . . .
Rungun? | *Korivi pala.* . . . TEL.
Jilpai. | *Komma chettu.* . . .
Koora, Koorat. . MAHR. | *Putta pala, Tedda.* . .

A small tree, common in the jungles of the S. of India. The flowers are very sweetly scented, and it blossoms in the hot weather. The wood is of a reddish-brown colour, the grain hard, very close, and easily worked. It gives a smooth surface and stands a good polish, is well adapted for the lathe, and is in use for furniture and building purposes. A cubic foot, unseasoned, weighs 78-84 lbs., and 66 lbs. when seasoned, and its specific gravity is 1.056. It burns very readily and clearly, and on that account its branches are often made into torches by people travelling at night.—*Voigt; Gibson; Ainslie; Irvine; M. E. J. R.; Beddome.*

IXOS LEUCOGENYS? the bulbul of Kashmir, is about 7½ inches length bill, head and legs black; plumage generally olive greenish brown, with a white spot behind the eye, and white tips to tail feathers. Crest black and curved forwards. It is quarrelsome and noisy. Its note resembles that of the English Blackbird, but is less full and musical.—*Vigue.*

IYAR-i-DANISH is the Persian version of the *Pancha-Tantra*.—*Dawson.*

IYAVAN. TAM. An out-caste, a worker in leather.

IYEN. and *Pather* or *Blutter*, in Travancore,

are titles of Tamil Brahmins. Iyengar, properly Aiyangar, amongst the Tamil people an honorific title to Brahmins.

ITYER means sir, master, lord, and is added to the names of Brahmins as a distinction. Iyer is immediately derived from the Tamil Aiyar, father, more reverentially pronounced Aiyangar. Iyer is used by a Hindu woman to attract her husband's attention,—no Hindu woman ever allowing herself to pronounce her husband's name. In Southern India it is used in the form of Ayah, as a lady's maid or child's maid. It is also assumed by Smartta and other Brahmins, and also by the Satani, a Hindu monotheistic sect who follow the doctrines of Chaitanya, and do not wear the punul or sacerdotal thread. Iyer is also adopted by Christian missionaries, and the Tamil equivalents Kanani and Sangi are added to their names, in addition to that of Iyer.

IZAR. HIND. Trousers; hence Izar-band, the trousers waist-string.

IZNEE, a fakir who acts as a messenger. Iznee Shah, a mohurrum fakir.

IZ-ud-DIN HUSAIN, the founder of the Ghori dynasty, was a native of Afghanistan. The origin of the house of Ghor has, however, been much discussed,—the prevailing opinion being that both they and their subjects were an Afghan race. Ala-ud-Din Ghori, A.D. 1152, completed the overthrow of the Ghaznavi dynasty, by the defeat of Bahram, the last king, who fled into India. The founder of the Ghori dynasty at Delhi was Shahab-ud-Din, who took the title of Muhammad.

J

In the English alphabet this letter has only one sound, as in jam, jelly, job, just; and, the Tamil excepted, each of the oriental languages of S. Asia has a letter with a similar sound. But the letter j has a different sound in the languages of the other European nations from that of the English tongue; and the French obtain the English sound by prefixing the letter d, thus, djam' for jam', a camel; djab' for jab', a mountain. The Germans and Dutch give to this letter the sound of y, and have proposed to obtain the sound of the English letter j by using an accented g', or writing it dsch. The people of Egypt often give to this letter the sound of s, and those of Yemen give it the sound of hard g, so that jab'l is pronounced gab'l, and jam'l is pronounced gam'l. Several of the Hindu races give to the letter z the sound of the English j, as jaban, jabti, jor, for zaban, zabti, and zor.

JABAL. ARAB. A mountain.

Jab'l-ul-Ballad, Media, Persian Irak.

Jab'l-ul-Makatib, Mount Sinai.

Jab'l Karim, Mount Olympus.

Jab'l-Sus, Mount Atlas.

Jab'l-ush-Shaikh, Anti-Libanus, the Hermon of the Hebrews.

Jab'l-ul-Taraq, Gibraltar.

Jab'l-ut-Tarush, Mount Ncho.

JABAL-ARAFAT, anciently called Jabal-Ilal, the Mount of Wrestling in Prayer, and now Jabal-ur-Rahmat, the Mount of Mercy, is a low pointed hillock, of coarse granite split into large blocks, with a thin coat of withered thorns, about one

mile in circumference, and rising abruptly from the low gravelly plain—a dwarf wall at the southern base forming the line of demarcation—to the height of 180 or 200 feet. It is about 12 miles on the Taif road, due east of Mecca. Near the summit is a whitewashed mosque with a minaret, looking like a small obelisk; below this is the whitened platform, from which the preacher, mounted on a dromedary, delivers the sermon, to be present at which it is an essential part of the Muhammadan pilgrimage to Mecca.—*Hamilton's Sinai*, p. 131; *Burton*, iii. p. 252.

JABAL HAUURAN. The waters of the Nahr-uz-Zerka, the Jabbok of the Scriptures, first collect to the south of Jabal Haouran; at this point they enter the Jabal Belka, and, after winding through the wadis in a westerly direction, finally empty themselves into the Shariat-ul-Kabir (the Jordan).—*Robinson's Tr.* ii. p. 171.

JABAL MIA ALLY, or Quoin Hill, 865 feet high, is near Bab-ul-Mandab.

JABAL MUSA, the Mount of Moses, is the name given by the Arabs to all that range of mountains which rises at the interior extremity of the valley of Faran; and, to that part of the range on which the convent of St. Catherine stands, they give the name of Tur Sina. The hill on which stands the convent of St. Catherine is supposed to be the Sinai of the Jews, on which Moses received the law.—*Niebuhr's Tr.* i. p. 191.

JABAL NAKKOUS, or Mountain of the Bell, is about 400 feet in height, and the material of which it is composed is a light-coloured friable sandstone; but an inclined plane of almost impalpable sand rises at an angle of 40° with the horizon, which, when put in motion, raises musical sounds. At their commencement, the sounds might be compared to the faint strains of an Æolian harp when its strings first catch the breeze; as the sand becomes more agitated by the increased velocity of its descent, the noise more nearly resembles that produced by drawing the moistened fingers over glass. The sounds sometimes fall quicker on the ear, at other times are more prolonged; but this swelling or sinking appears to depend upon the Arabs increasing or retarding the velocity of the descent. It is about 4½ hours' journey from Tur. The same is told of the Goz-ul-Hannan or Mourning Sand-heap in the Wadi Urnub; also of the Reg Rawan in Afghanistan.—*Wellsted's Tr.* ii. pp. 24-26.

JABALPUR or Jubbulpur, a town and district in the Central Provinces, lying between lat. 21° 12' and 23° 56' N., and between long. 76° 40' and 81° 35' E. During the minority of Prem Narain (1550?) the Gond queen Durgavati administered the government; and Asaf Khan, the viceroy of Kara Manikpur on the Ganges, conquered the Gorkha principality. The decisive battle was fought under the castle of Singuargarh. Stung by her defeat, Durgavati put an end to her life.

The district is one of the largest and most populous in the Central Provinces. The main part of the district is a large plain of rich soil watered by the Nerbadda, the Paret, and the Hiran. About nine miles from Jabalpur on the south-west, a considerable extent of tolerably pure and beautifully saccharine white limestone is seen; the river cuts a deep channel through the mass of this rock, exposing sheer vertical surfaces of the white limestones in places 220 feet high; it

is scarcely possible to exaggerate the picturesque effect of the varied outline and colour of the whole. The locality is well known as the Marble Rocks. Coal is found at Ramghat, Lametaghath, and near Singapore on the Mahanadi. The latter seam is 18 inches thick, and is said to be poor and unworkable. The Lametaghath coal promises well. Iron is found in more than a hundred places, of which the principal are Simra, Gogri, Bolia, Agaria, Dalrora, Jauti, Panagar, and Lameta. The iron is worked entirely by native processes. The people are for the most part Gond, Gond Rajput, Kol, Bharia, Baiga, Lodhi, Ponwar, Kurmi, Kahar, Dhimar, Dher, and Chamar. There are also Brahmans, both from Maharashtra and from Mathura; Kayasths from Farrakhabad and elsewhere, and Muhammadans. There are now no Gond landholders of any importance, but there are some Lodhi chiefs who once possessed a local celebrity.

JABALPUR HEMP, *Crotalaria tenuifolia*, is a perennial plant, native of Coromandel, which grows to 6 or 9 feet high, and yields this fibre. It is considered equal to Russian hemp, and bears a heavier weight.

Kind and quality of rope.	Size.	Government Proof.	Breaking weight.
Oiled Jabalpur hemp, artillery traces,	Inches. 3	Cwt. 36	Cwt. qr. 43 2
Untarred do., superior four strand, plain laid,	3½	42	83 0
Untarred Dhunchee (<i>Æschynomene cannabina</i> , Roxb.),	3½	49	75 0
<i>Sesbania aculeata</i> ,	3½	42	57 0
Pine-apple fibre,	3½	42	57 0

A good deal of the value of this plant is supposed to be the result of the climate and soil in which it is grown.

JABAL SHAMSAM, the highest wall of the Aden crater, where Cain is supposed to have been buried; elevation, 1775 feet.

JABAL TEER, a small islet with two peaks in the Red Sea, in lat. 15° 32' 30" N., and long. 41° 50' 30" E., 34 miles N.W. from Jabal Zebayer, and 900 feet high. It is supposed to be volcanic, as smoke is said to have been issuing from it at the time of its survey.

JABAL TUR, a mountain near Mount Sinai, or Mount Sinai itself.

JABAL TUR, a spur of the great Taurus range, which forms the watershed of the Tigris, from Mardin to its south bend opposite Jazirah-ibn-Umar. It is a continuation of Karajah Tagh, and continues into the Sinjar Hills.—*MacGregor*.

JABAL-ul-JUDA, Aghri Dagh, or Mount Ararat, the Ararat of modern geographers, in the province of Erivan, is in height about 16,200 feet. In the last volume of *Cosmos*, Humboldt records the height of Demavend at 19,715 feet, which is 1785 feet under the height attributed to it. According to some authorities, Ararat is only 17,112 feet high. General Monteith made it 16,000 feet above the level of the Araxes. Agri-dagh is the name given to it by the Turks; but all unite in revering it as the haven of the great ship which preserved a father of mankind from the waters of the deluge. Ararat is called by the Armenians, also, Massissinsar, or Mountain of the Ark. Berosus and Alexander both declare that in their time it was reported that some

planks of the ark remained on this hill at the date of the accession of the Abbasside khalifs, A.D. 749.

The usual Muhammadan tradition places the grounding of the ark, not on Armenian Ararat, but on the Jabal Judi in Kurdistan, whence Benjamin of Tudela says (p. 93), Omar bin Khatab removed the ark from the summit, and made a mosque of it. Demavend is believed to be fully 4000 feet higher than Ararat.—*Yule, Cathay*, l. p. 467; *Porter's Tr.* i. 183; *General Monteith*.

JABAL ZABARAH, the Samaragdus Mons of the ancients. It has the famous emerald mines which were worked B.C. 1650, in the time of the great Sesostris II., by extensive galleries. It was again worked in the early part of the reign of Muhammad Ali. The mines were on the Cosseir road from Koptos to Aennum (Philoterias). Wellsted thinks (*Trav.* ii. p. 323) that the locality indicated by Bruce was the island of Wadi Jemal, and that the Arabs had so called it because of its proximity to the only emerald mines on the adjacent continent.—*Bunsen's Egypt*; *Wellsted*.

JABER, the Killa Husn Jaber of the Arabs, the ancient Roman town of Beles, about two miles from the Euphrates. It is the Ezion-geber of Scripture (1 Kings ix. 26-28).—*Catagago*.

JABRAI. At Amraoti in Berar, the deities worshipped are named as under:—

Male deities.

Jabral Abrai.
Massoba.
Bahram.
Mahadeo.
Shadawal.
Kandoba.
Worba.
Yetoba, Vittoba.

Female deities.

Asra or Asrai.
Menkai.
Amba.
Marri.
Satwai.
Agachi Panna.
Jana Bai.

Jabral is worshipped at and near Ellichpur, and seems to be the angel Gabriel, whom Muhammadans style Jabrail. In the alliterative habits of the orientals, the term Jabral Abrai is commonly used, and the silver figure, that of a man, is worn around the neck. Near Amraoti, also, is a rag tree, with incense on altars of mud at its foot, which the Dher of Balgaon said was a Jabral. Sakinnath is a deity of Amraoti, whose worship protects from snakes. In the Chauki pass, in the Lakenwara range, which forms the watershed between the Godavery and the Tapti, about 10 miles north of Aurangabad, there is a shrine of the deity called Massoba, to which people of all castes resort, from a circle of a hundred miles, Brahman, Sudra, and Dher, but chiefly the Mahratta Kaubi. The Jatra is held in the month Cheita, and lasts for four days, during which many sheep are offered in sacrifice. It is in the southern side of the pass, a mere block of stone, with smaller blocks at its foot, all smeared with red lead. The objects of their visits are wholly personal, beseeching the deity to give, or preserve, their children, their flocks, or their food.

JABRANG, a coarse description of silk, made by a wild tribe, who are the only people in Pegu that rear the silk-worm and cultivate the mulberry.—*Local Committee, Rangoon*.

JABU or Zhubu, a hybrid between a male yak and a cow. It is more valuable than the pure yak or the garjo hybrid between a bull and female yak. It is used for riding, also for carriage, and will carry from two to three maunds; is very sure-footed, hardy, and docile. Its price in Kamaon

JACANA.

is Rs. 20 to Rs. 50; both varieties breed freely together, and also with the pure stock. None of them bear the heat of the plains.

JACANA.

Parra anas, Cuv. | *P. superciliosa, Horsf.*
Dal-pipi, Jal-pipi, BENG. | Kattoi, Karatiya, BENG.

This singular bird, the *Metapodius Indicus*, *Latham*, is a native of all India, of N.W. Himalaya, and of China, and is distinguished not less by the grace of its form than by its adaptation to the localities for which nature has allotted it. Formed for traversing the morass and lotus-covered surface of the water, it supports itself upon the floating weeds and leaves by the extraordinary span of the toes, aided by the unusual lightness of its body. Like the moor-hen, of whose habits and manners it largely partakes, it is doubtless capable of swimming, the long and pendent tail-feathers being elevated so as not to dip in the water. It may be seen in the N.W. Himalaya squatting on the broad leaves of the lotus, *Nelumbium speciosum*, and marsh marigold (*Calla palustris*). Its flight is not strong, and is composed of many flaps; the call is rough, like that of the water-hen. The curved tail-feathers, the brilliant yellow patch on the hind part of the neck, and shining brown of the back, white wings more or less tinged with black, at once serve to distinguish it.—*Adams; Williams' Middle Kingdom*, p. 263; *Jerdon*, p. 708.

JACK. Dr. William Jack was appointed to the Bengal Medical Service in 1813. During the Nepal war of 1814-15, he was attached to the army under General Ochterlony. In 1818, Sir Stamford Raffles, Governor of the British Settlements in Sumatra, offered him an appointment on his staff, promising him every facility for the exploration of the natural history of that island. Jack's descriptions of Malayan plants were published in the *Malayan Miscellanies*, and were reproduced by Sir William Hooker in the companion to the *Botanical Magazine*, and by Dr. McClelland in the *Calcutta Journal of Natural History*. He died 16th September 1822, on board the ship on which he had embarked on the previous day to proceed to the Cape of Good Hope.—*H. and T. Fl. Indica*.

JACKAL.

<i>Canis aureus</i> , <i>Linn.</i>	| <i>Lupus aureus</i> , <i>Kampfer</i> .
<i>C. aureus Indicus</i> , <i>Hodg.</i>	
Shaghal, ARAB.	Alopex, GR.
Shigal, AR., DUT., PERS.	Shu'al, HEB.
Siar, Sial, BENG.	Ghidar, HIND.
Amu, BHOT.	Kola, HIND., MAHR.
Nari, CAN., TAM.	Srigala, SANSK.
Jackhals, DUT.	Nakka, TEL.

The jackal is found in Syria, Arabia, Persia, in all India west of the Brahmaputra, and over S.E. Europe. Both the jackal and the hyæna are more or less plentiful, affecting even the mountainous regions to pretty high altitudes. Along the line of the Ganges, in Lower Bengal, they move in packs and eat indiscriminately. In the Peninsula, they are of larger size, are often seen singly or in pairs, and in the Dekhan live much on wild fruits; the coffee-bean of the plantations is largely eaten by them. Their cry when moving at night is very disagreeable, and even when clicketing, their call is unpleasant. Among mammals, the jackal, hyæna, domestic swine, and dog; and among birds, vultures, kites, crows, minas, and the

JACKAL.

adjutant bird *Leptoptilos argala*, *Gmel.*, are the chief carrion eaters of S.E. Asia. The swine, the buffalo, the cow, the bullock, and even sheep, in many parts of India, are driven daily to the purlieus of the towns. The jackal and hyæna are of nocturnal, bold, and stealthy habits, and though the hyæna hunts generally singly, the jackal does so in packs, and anything in the way of flesh, putrid or otherwise, is acceptable. The cry of the jackal is peculiar; it is composed of a succession of half-barking, half-wailing cries, on different notes. When properly pronounced, there is no better illustration of it than the following words, set to the tones of the animal's voice:—

'A dead Hindu! a dead Hindu!
Where-where? where-where?
Here-here; here-here.'

The jackal in the Peninsula of India and in the low country of Ceylon sometimes hunts in packs, headed by a leader, and they have been seen to assault and pull down a deer. The small number of hares in the districts they infest is ascribed to their depredations. When a jackal has brought down his game and killed it, its first impulse is to hide it in the nearest jungle, whence he issues with an air of easy indifference, to observe whether anything more powerful than himself may be at hand, from which he might encounter the risk of being despoiled of his capture. If the coast be clear, he returns to the concealed carcase, and, followed by his companions, carries it away. But if a man be in sight, or any other animal to be avoided, the jackal has been seen to seize a cocoanut husk in his mouth, or any similar substance, and fly at full speed, as if eager to carry off his pretended prize, returning for the real booty at some more convenient season.

The following anecdote may be told of a jackal:—'Going homewards I shot a fine buck chital (or spotted deer), and while following up his prints and blood, as silently as possible, in the hope of getting another shot upon our again starting him, we heard a great stamping and crashing of bushes about forty yards ahead; soon we saw the buck trying to shake off a large jackal that had pinned him by the throat. The chital in vain tried, by swinging his head backwards and forwards violently, to dislodge the jackal, who, doubled up like a ball, held on as well as the best bull-dog could have done, nor did he lose his hold until, after watching this strange scene for some minutes, I dropped the chital with another shot. The jackal hastily retreated. Often when walking after a wounded black buck or antelope in the plains, I have seen one or two jackals trotting along in the exact direction the wounded antelope had gone off. There is very little chance of any wounded small animal escaping such watchful creatures.'

The kole balloo is an aged jackal which accompanies a tiger, and feeds on the tiger's prey. Jackals are subject to hydrophobia, and instances are frequent of cattle being bitten by them and dying in consequence. An excrescence or small horny cone, about half an inch in length, and concealed by a tuft of hair, is sometimes found on the head of the jackal. This the Singhalese call narri-comboo; and they aver that the possessor of this can command by its instrumentality the realization of every wish, and that if stolen or lost by him, it will invariably return of its own accord. Those who have jewels to conceal rest in perfect

security, if, along with them, they can deposit a narri-comboo, fully convinced that its presence is an effectual safeguard against robbers. The words of Psalm lxxiii. 10, 'They shall be a portion for foxes,' appear obscure; but if they be rendered, 'They shall be a portion for jackals,' the anathema becomes plain and striking to a Hindu, in whose country the disgusting sight of jackals devouring human bodies may be seen every day.—*Tennent's Ceylon; Eothen's Tr.; Ward's Hindoos; Adams' Naturalist in India.*

JACKDAW, *Corvus monedula*, of Europe, Siberia, Barbary, W. Asia, Peshawur valley, and Kashmir, may be seen in flocks in winter in the northern frontier of the Panjab, associated with the Cornish chough and the rook.—*Adams.*

JACKETS, coats, and vests are worn by Hindus and Muhammadans in India. They are called koorta, angarkha, nuna, anga, mirzai, kufcha, kuba, jama, chupkan, dagla, tabada, jora.

JACK-FRUIT TREE, *Artocarpus integrifolius*. Some varieties bear a fruit from 10 to 60 lbs. in weight, much esteemed as an article of food by the natives in India. The dye obtained from its heart-wood, as prepared by the natives, is a brilliant orange-yellow, and is obtained by the addition of an infusion made from the leaves of the Don-yat, producing a brilliancy of colour not excelled by the best English dyes. The tree is of value for its fruit and its timber. In many places it is found 2½ feet in diameter, and from 30 to 35 feet high. In Canara it was preferred by Tipu Sultan for the grab vessels built at his naval depot, Honore. In Ceylon it is used by the furniture-makers for chairs, couches, etc., for which purpose it answers well; and, if polished with care, its brilliant colour is superior to that of mahogany.

Jackwood is imported into Bombay from the Malabar coast, and was at one time in great request there for making furniture. Of late years, however, it has been entirely superseded by blackwood for this purpose. It is imported into Britain in logs from 3 to 5 feet diameter, and also in planks; the grain is coarse and crooked, and often contains sand. The wood is yellow when first cut, but changes to a dull red or mahogany colour. It is used in India for almost every purpose of house carpentry and furniture, and in England for cabinet-work, marquetry, and turning, and also for brush-backs. Jackwood is sometimes misnamed orange-wood from its colour.—*Baker's Papers; Holztafel; Edye, Forests; Faulkner.*

JACOB, grandson of Abraham, the Yakub of the Arabs, a patriarch of the Israelites. Jacob was father of twelve sons, who founded the twelve tribes of the Hebrews; he went to Egypt B.C. 2747-46.—*Bunsen.*

JACOB, GENERAL LE GRAND (1851), Resident at Bhoj. Author of an Account of Gumli or Bhunli; Report on the Iron in Kattyawar, its comparative Value with British Metal; Mines and Means of Smelting Ore, Lond. As. Trans. v. p. 73, viii. p. 98; Brief Historical, Geological, and Statistical Memoir on Okhamaudul, in Bom. Geo. Trans. v. p. 157; Report on the District of Babriowar, ibid. vii. p. 700; Inscriptions from Palitana, in Bom. As. Trans. i. p. 56; on the Asoka Inscriptions, Girnar, ibid. p. 257.—*Dr. Buist's Catalogue.*

JACOBABAD, a frontier district of Sind, between lat. 27° 56' and 28° 27' N., and long. 68° to

69° 44' E., which comprises the tract of country bounded by the Bugti Hills on the north, by Kalat on the west, the Bigari canal on the south, and the river Indus on the east. The district attains to from 170 to 257 feet above the sea. From 1865 to 1870 the rainfall ranged from 1.11 to 8.80 inches. At the extreme north is desert plain. The Sind Hollow, a former bed of the Indus, traverses one-third of the district, and between it and the river the country is split up into numerous 'dhund' and 'dhorec.' On its north is a range of barren hills with fertile valleys, occupied by the Murree and the Bugti. Baluch tribes, Jumali, Dumki, Jakrani, Khosa, Mazari, form the population; Burdi, Sindi, Jumma, the nomade Jat, who rear camels, cattle, sheep, and goats, and Hindu cultivators. The Jat are a hardy, good-looking, industrious race, and their women are very comely, and drink largely of camels' milk. The Baluch use jowari (sorghum) flour, and bajra (*Penicillaria spicata*), and milk. The cultivation is by irrigating canals.

Jacobabad was founded by Major-General John Jacob as an entrenched camp, for the purpose of checking the inroads and forays of the Baluchi. The average annual rainfall is 4.39 inches; in 1869, 12.05 inches, and in 1867, 0.97.

JACOB'S WELL, in the valley of Nablous, a few miles south of Shechem, is 75 feet deep.

JACQUEMONT, VICTOR, born at Paris 1801, died at Bombay 7th December 1832. He was a travelling naturalist to the Royal Museum of Natural History at Paris during the years 1828-29, 1830-31, and 1832. He travelled in India, the Himalaya, Ladakh, Tibet, Panjab, and Kashmir. His travels were published in the form of letters to his relatives.

JACYNTH, a gem owing its deep orange colour to the presence of zircon. It is the gul-maidah of India.

JADABILAY. TAM. A woman's head ornament in the Tamil country. See Jewellery.

JADDI. MAHR. Land left to grow fodder.

JADE.

Yuh, CHIN. | Yashm, Sang-i-yashm, PERS
Khas, MONGOL. | Sootash, TURK.

This mineral, called also nephrite and axe-stone, is celebrated in China as the Yuh or gem of gems. It is found in Fung-tien-fu (Shing-king), Lien-chau-fu (Canton), in Shan-tung, near Khoten, Karakash, Yarkand, and other places in Turkestan; in the rivers among the Siansk mountains, to the S.W. of Lake Baikal, in Eastern Siberia, at Mogoung north of Burma, and other places in Eastern Asia; also in N. Zealand, Egypt, Polynesia, and a few localities in the United States. It is of white, blue, yellow, and green colours; but the milk-white and the light-green varieties are most prized. Chemically, it consists of the silicates of magnesia and alumina coloured to the tint of the stone by varying proportions of chromium. Its hardness, weight, sonority, and peculiar sombre tint are the foundation of the Chinese taste for this stone. Their wearing of this stone is supposed to impart to the wearer, humane, just, intelligent, brave, and pure qualities, and philosophers and physicians have ascribed all sorts of properties to this substance, which for any medicinal purpose can be no better than soapstone or steatite. Jade mines in the Kouen Lun mountains have been described by Dr. Cayley in Macmillan's Magazine, October

1871. At a very early date nephrite was sent as a tribute to the imperial court. The emperor Chinnoung (B.C. 2737) delighted in ornaments of nephrite, and the emperor Chau-sin (B.C. 1154) had a pillow made of the same material. A chief source for nephrite is in Khotan. M. Blondin says—'La ville d'Yarkande envoie chaque année à Khotan pour être expédiées à la cour de Peking 6000 kg. de jade. Nous ne comprenons pas dans ce chiffre les pièces taillées et sculptées, on ne peut plus habilement, par les lapidaires d'Aksou, la capitale actuelle de la Tartarie Chinoise, par ceux de Kachghar, et enfin par ceux d'Yarkande, l'ancienne capitale où le travail de jade occupe le plus de bras.'

Mr. John Anderson (Report on the Expedition to Western Yunnan, via Bhamo, Calcutta 1871) visited the bazar of Momiên. He says the copper discs used in cutting jade are very thin, bend easily, and measure about one foot and a half in diameter. The centre is beaten out with a cup-shaped depression, which receives the end of the cylinder on which the disc revolves. In one establishment two men were at work, one using the cutting disc and the other a revolving cylinder tipped at the free end with a composition of quartz and little particles resembling ruby dust. Both were driven by the feet. The stone is held below the disc, under which there is a basin of water and fine silicious mud, in which the stone is dipped at intervals, the operator filling his hands with as much of the mud as possible. The stones are cut into discs one-eighth of an inch in thickness, when they are intended for ear-rings, and are then made over to the man at the silicious-tipped cylinder, who bores a round hole in the centre of each. The same course is followed in the case of the larger and thicker rings. Bangles made of jade come from Mogoung, in the north of Burma; the bright green tint seen in these specimens is the characteristic peculiarity of the Burmese jade. It occurs there in the form of rounded boulders, and is exported to China.

The Chinese have probably some sources of green jade unknown to us. Their jadeite, a different mineral from jade, is supplied, though probably not exclusively, by mines in the mountains to the north-west of Bhamo in the Lao State of Burma. Jahanghir and Shah Jahan seem to have taken pleasure in jade cups and ornaments; and the art of inlaid work that found such exquisite expression in the Taj Mahal was copied under their munificent auspices in the most precious materials, rubies and diamonds and other precious stones being inlaid in jade of various colours, which was cut in delicate open-work and adorned with enamels, in the production of which India is still unrivalled. The collection of these beautiful productions of Indian art contained in the India Museum is the finest ever brought together.

Jade possesses the virtue of an extraordinary toughness. Easy to work when freshly extracted, it hardens just sufficiently to do the work of cutting, yet retain an edge. On that account New Zealanders used jade as well for tomahawks as for amulets, and the jade relics disinterred in Switzerland are often in the shape of hatchets.

The Mexicans worked a kind of jadeite. The Maoris work jade, which is a native mineral in their hornblende rocks; and the inhabitants of

New Caledonia, and indeed of Polynesia generally, have fashioned jade or some varieties of jadeite into implements useful, ornamental, and perhaps too, in one sense, sacred.

A cargo of this mineral was imported into Canton from New Holland, but the Chinese would not purchase it, owing to a fancy taken against its origin and colour. The Chinese use it for mandarins' buttons, pipemouth pieces, and various articles of personal ornament and luxury. They estimate it according to the purity of the white and brightness of the green tints.

JADU. HIND. Enchantment; hence Jadugar, a sorcerer.

JADUN, a race on the right bank of the Indus where that river issues from the Himalaya near Torbela. They are Pathans who speak Pushtu. They inhabit a tract below the Husanzai country, and on the right bank of the Indus opposite the British town of Torbela, and thence stretching westward. In this tract the most notable place is Mount Mahabun, of classical celebrity.

Beyond the Judun country on the north-west is Booneer or Bunoor. It is a rugged country, extending from the lower range of the Hindu Kush downwards to hills which command the Chumla valley and the central plain of the Yusufzai. On its western frontier, again, lies the Swat territory.

JAEDAD. PERS. Signifies a place or employment; also, in accounts, assets, funds, resources.

JAETI, gladiators; in the south of India Jetti. Colonel Tod mentions that in one of the courts in Cutch funds were set apart for Jaeti, at one time to fifty thousand rupees per annum. In the akhara (arena), with the prize-fighters Asman dikhana is their phrase for victory, when the vanquished is thrown upon his back and kept in that attitude.—*Tod's Rajasthan*, ii. p. 589.

JAF, a very large predatory tribe residing near Kanaki, on the Dialla, dependent on Turkey, and numbering about 25,000 families. They inhabit in winter the plains of Sulimania and Zohab, and in summer migrate to the mountain of Ardelan. They are the most warlike and unruly of all the Kurdish tribes; a fine-looking, brave people, but esteemed exceedingly uncivilised and barbarous even by the Kurds.—*Ferrier, Journeys*, p. 68; *Rich's Kurdistan*, i. p. 112.

JAFFA, or Yaffa as it is called by the natives, is the representative of the ancient Joppa, so often alluded to in holy writ. The timber hewn on Mount Lebanon for Solomon's temple was floated to this port (2 Chronicles ii. 16). Here Peter raised Tabitha from the dead (Acts ix. 42), and Simon the tanner resided. In this harbour, Judas Maccabæus burnt the Syrian fleet. The tract of country lying between Jaffa and Gaza westward of the mountains of Judea, was the ancient territory of the Philistines, and included the five cities of Gaza, Askalon, Ashdod, Gath, and Ekron. This district still bears the name of Palestine. It is the nearest seaport to Jerusalem, and is about 30 miles S. of Cæsarea. It is built on a hill jutting into the sea. It has seen St. Paul, Pompey, Salah-ud-Din, and Napoleon. At four hours' journey is Edzoud, the ancient Azotus and the Ashdod of Scripture (2 Chronicles xxvi. 6).—*Robinson's Palestine*, i. pp. 16, 21.

JAFFERABAD, on the Gujerat coast, in lat. 20° 52' N., has the best river on the coast. The

chief of Jafferabad, who resides in Gujerat, the sidi of Janjira, who resides in the Konkan, and the nawab of Sucheen, are all of African origin.

JAFFERI - KASM. ARAB., is an oath considered by Muhammadans to be more solemn than that used in British Indian courts. Its words, *Aksamto B'illa hil Jabbar, il Kahar, il Mutakabbir, il Muntakim*, mean, I swear in the name of the Omnipotent, Indignant, High, and Avenging God.

JAFFNA, a district and town in the northern part of Ceylon. In the sandy parts of Jaffna a hollow palmyra is inserted to form a well.

JAG. Amongst the Mahrattas, if a Sudra die suddenly, his family hold a riotous vigil on the 10th night after the demise; it is called *Jagar*, and the object is to compel the spirit of the deceased to enter the body of the son or of some other person to reveal any secret matter desired to be known. *Jagla*, a night watchman. *Jagni*, a torch. The word is from *Jagna*, to wake.—*Wils. Gloss.*

JAGA or **Jaga-Bhat**, a division of the Bhat tribe.—*Wils.*

JAGADHRI, town in the Umballa (Ambala) district, Panjab, and has a considerable manufacture of metal work, vessels, and tools; also a refinery of the borax brought from the hills, and a manufacture of oxide of lead, for use by goldsmiths and in native medicines.—*Imp. Gaz.*

JAGANATHI, Jaganatha, vernacularly Juggurnath, from Yoganatha, lord of the world, is a name now especially applied to Vishnu in the form in which he is worshipped at the temple of Jaganath at Puri in Orissa. All the land within 20 miles round this pagoda is considered holy, but the most sacred spot is an area of about 650 feet square, which contains fifty temples. The most conspicuous of these is a lofty tower about 184 feet in height and about 28 feet square inside, called the *Bur Dewali*, in which the idol and his brother and sister Subhadra are lodged. Adjoining are two pyramidal buildings. In one, about 40 feet square, the idol is worshipped, and in the other the food prepared for the pilgrims is distributed. The temple was restored in its present form in A.D. 1198 by Raja Bhim Deo of Orissa, at an outlay of £500,000. It is in a square enclosed by a high stone wall, 250 yards each face, with the principal gateway on the eastern side. The walls are covered with statues, many of which are in highly indecent postures. The grand entrance is on the eastern side, and close to the outer wall stands an elegant stone column, 35 feet in height, the shaft of which is formed of a single block of basalt, presenting sixteen sides. The pedestal is richly ornamented. The column is surrounded by a finely-sculptured statue of Hanuman, the monkey chief of the Ramayana. The establishment of priests and others belonging to the temple has been stated to consist of 3900 families, for whom the daily provision is enormous. The holy food is presented to the idol three times a day. His meal lasts about an hour, during which time the dancing girls, the *Deva-dassa*, belonging to the temple, exhibit their professional skill in an adjoining building. Twelve festivals are celebrated during the year, the principal of which is the *Rath Jatra*. In the early years of the 19th century many statements were made as to the self-sacrifice of pilgrims by throwing themselves beneath the wheels. But self-immolation is entirely opposed to the worship of Jaganath,

and the rare deaths at the car festival were almost always accidental, though there have doubtless been instances of pilgrims throwing themselves under the wheels in a frenzy of religious excitement. Any death within the temple of Jaganath renders the place unclean. The ritual suddenly stops, and the polluted offerings are hurried away from the sight of the offended god. According to Chaitanya, the Orissa apostle of Jaganath, the destruction of the least of God's creatures is a sin against the Creator. Self-slaughter he would have regarded with abhorrence. The image of the god is a rude block of wood, and has a frightful visage with a distended mouth. His arms, which, as he was formed without any, have been given to him by the priests, are of gold. He is gorgeously dressed, as are also the other two idols which accompany him. In a compartment in the temple of Rama, he is represented in company with Bala Rama and Subhadra, without arms or legs. The temple is built on a low sandy plain about 1½ miles from the shore. The car is painted with obscene figures. In the festivals at this Hindu temple the images brought forward are those of Krishna, his brother Bala Rama and sister Subhadra, and the populace reproach Krishna and his sister for having indulged in a criminal intimacy. In the *Mahabharata*, Subhadra is stated to have been married to Arjuna. Bala Rama and Subhadra are also similarly accused. Multitudes of pilgrims resort thither, especially at the two great festivals of the *Snana Yatra* and *Ratha Yatra*, in the months of *Jyaishta* and *Ashadha*. In the *Snana Yatra*, the image is bathed; in the *Ratha Yatra*, or car festival, it is brought out upon a car, with the images of Bala Rama and Subhadra, and is drawn by devotees. Jaganath temple has three prominent classes of servants,—the *Parcha* or head priests, who superintend the collection and disbursement of the revenues, and see that the worship is conducted in an orderly manner; the *Parharri*, who dwell within the holy land of the temple, guard the seven inner doors of the pagoda, attend during the day and watch over it at night, and present pilgrims to the idol; and the *Pandas*, who serve chiefly in the pagoda. The vile *Pandas* of Puri is a saying in every mouth.—*Cole. Myth. Hind.* p. 52; *Carney*; *Dowson*; *Imp. Gaz.* iv.

JAGAT. HIND., SANSK. The world. *Jagat-Narayana*, a title of Vishnu. *Jagatganj*, a place near Benares. *Jagat Point*, a projecting land in Gujerat.

JAGATI. KARN. A gong. *Jagati Dasari*, in Mysore, religious mendicants who beat a gong as they move along the streets begging.—*W.*

JAGDALAK, a river, a valley, and defile in Afghanistan. The river rises in the kotal or pass, and after a course of ten miles falls into the Kabul river. The valley is occupied by the *Jabr Khel*, *Ibrahim*, and *Ghilzai*. The defile is steep, narrow, and winding, its width averaging 40 or 50 yards, but at one place is only 6 feet. It was in this defile that on the 12th January 1842, the remnant of the retreating division of the British Indian army were destroyed; only a few pressed on to Gandamak.—*MacGregor*, pp. 395-97.

JAGGERY.

Kund,	ARAB.	Guda, Gura,	SANSK.
Coompta sugar,	BOMBAY.	Kara vellam,	TAM.
Jagari, Gur,	GUJ., HIND.	Nalla bellum,	TEL.

Unrefined sugar, produced by evaporating the

juices of palms, the cocoanut, the date, the *Caryota urens*, the *Nipa fruticans*, palmyra, and gomuti. In Bengal, it is from the *Elate sylvestris* or wild date that it is made. In Ceylon three palms yield palm sugar, the cocoanut palm (*Cocos nucifera*), the palmyra palm (*Borassus flabelliformis*), and the kittal or jaggery palm (*Caryota urens*). From each of these palms the juice of the flowering stalk is collected under the name of toddy, and from it jaggery is regularly prepared; but it is from the palmyra palm that nearly all the palm sugar is obtained, and it is from the saccharine matter of the cocoanut palm that arrack is made in Ceylon. This palm becomes productive there in about six or seven years. In collecting its toddy, the spathe is stripped off from the spadix before it has fully expanded; the spadices are afterwards beaten between pieces of hard wood, and slices are cut with a sharp knife so as to allow the juice to flow out. Each spadix continues to yield juice for about 40 days, at nearly the average rate of half a gallon in 24 hours. When it is intended to prepare jaggery from the toddy, great care is taken by burning pieces of wood in the small earthen vessels to be attached to the flowers, and rubbing their interior with charcoal, to remove any impurities likely to promote fermentation; and as an additional precaution chips of the bark of the *Vateria Indica* are placed in each, in order to retard fermentation.

JAGHIR, the state revenues of a tract of land assigned, with or without conditions, with the power to collect and appropriate the state revenue and carry on the general administration. This tenure was most common under the Muhammadan government. The jaghir given to the English East India Company by the nawab Muhammad Ali, nawab of Arcot in the Carnatic, extended to the Pulicat lake northward, to Alamprave southwards, and westward beyond Conjeveram; that is, about 120 British miles along shore, and 47 inland in the widest part. This jaghir is now the Chingleput collectorate. Jaghirdar, holder of a jaghir.—*Elliot; Rennell's Memoir*, p. 264.

JAG JIVAN DAS, founder of the Sad'h Nami sect, was born at Sardaha in the Bara Banki district, 40 miles E. of Lucknow, in Samvat 1738 (A.D. 1682). His father, Ganga Ram, was a Chandal. Wilson says that he was a Kshatriya. He composed the Agh Binsh (Aghavina, sin remover), which is the sacred book of the sect. It is of various metres, and is a thick volume. He also wrote the tracts *Inyan Prakas*, *Maha Pralaya*, and *Pratham Grantha*; these are in Hindi couplets. The sect are found chiefly between Benares and Amritsar. The king of Oudh, about the middle of the 18th century, granted to the sect the village of Katwa, and Jag Jivan Das died there, A.D. 1761 (Samvat 1817). He left five sons. The sect prohibit the use of Masur, all intoxicating liquors, and also the egg plant fruit. He was a Grihastha or householder through life. The Sad'h Nami is a unitarian Hindu sect, who profess to adore the True Name alone, the One God, the Cause and Creator of all things, Nirgun or void of sensible qualities, without beginning or end. Although they profess to worship only the one God, they borrow their notions of creation from the Vedanta philosophy, and recognise accord-

ingly the whole Hindu pantheon.—*H. H. Wilson*, i. p. 357.

JAGLAIN, a Jat clan, proprietors of a few villages in Paniput Bangur.—*Elliot, Supp. Gloss.*

JAH. PERS. Splendour; the second title amongst Muhammadans in India, as Asaf Jah, Azim-Jah. See Titles.

JAHAD. ARAB. A religious war of the Muhammadans; generally used to designate a war against other religionists. It is described by the Arabs as *Jahad-fi-Sabil Allah*, a war on the path of the Lord. Unprovoked war is contrary to the letter and spirit of the Koran; but war against the enemies of El Islam, who have been the first aggressors, is enjoined as a sacred duty; and he who loses his life in fulfilling this duty (if unpaid) is promised the rewards of a martyr. Verses 40, 41, chapter 21st of the Koran, are believed to be the first passage that was revealed respecting religious war. From Mahomed's time there were many small religious wars; but of memorable jahads, two by Harun-ur-Rashid in A.D. 902 against the emperor Nicephorus, all those of the Crusades led by Salah-ud-Din and others, and the great Wahabee movement at the close of the 18th century in Arabia, aimed at bringing Islam back to the actual state of things which existed in the prophet's time. This was a jahad pure and simple, and its promoters not only attacked Christians as unbelievers, but drove out their Turkish Muslim masters, and sacked the holy cities of Mecca and Medina, because they had been profaned with foreign rites. The movement was a purely Arab one, but it relied upon precisely the same principles as those of Mahomed himself; and as these are the recognised foundations of Islam, it found an echo elsewhere. Yet when, later on, it was endeavoured to prove that India was a *dal ul harb*, or enemy's country, and that it was the duty of all Muhammadans, as such, to rise against their Christian rulers, the Ulema, with scarcely an exception, pronounced fatwas adverse to this opinion, and a meeting of doctors at Mecca taking the same view, the jahad was negatived once for all, and made impossible in the future. So far as Wahabeeism appealed to Arab peoples, it was eminently successful; elsewhere the summons was unheeded. Some of the Arab tribes, and with them some of their descendants, are exceedingly excitable, and there have been instances of this excitability among the Turk and Mongol converts; and the proclamation of a jahad would probably have met with response among the Arabs who migrated to Africa, and who set up the rival Muhammadan khalifat in Spain. But the jahad of the Crusades was brought about by the Christians themselves, who took the initiative. The Saracen rulers and inhabitants of the Holy Land, whether of Arab, Persian, or Moghul descent, found their very existence suddenly threatened, and banded together to avert the common danger. How high Muhammadan feeling ran at the time may be gathered from a contemporary Arabic ode, addressed to a grandson of Salah-ud-Din on the construction of extra fortifications at Damietta. The poet says:—

'Our holy faith exalteth still in thee,
With victory's robes endued;
The miscreant bands of infidelity
Are driven back subdued.

These do we humbly now congratulate
For what thy lord hath given,
For deeds that shall be looked upon as great,
When deeds are weighed in heaven.

Egypt rejoiceth, but not she alone,
Baghdad rejoiceth more;
For had her king less pious ardour shown,
She that was heretofore

The "Abode of Peace" had suffered war's alarm;
Nay, but for Kamil's aid,
I swear that Muslims would have dreaded harm
E'en in the Kaabah's shade.

Damietta wreaks her vengeance on the horde
Of foes who filled her strand,
Lo! he hath cleansed her city with the sword,
And with his holy band.

Prayers, to Damietta's altars long unknown,
Hath he restored again:
Ah, how long, yearning for the solemn tone,
Had they in silence lain!

The Benu Asfar with the yellow hair,
If e'er they sleep, meseems
Nought but thy yellow standard's flaunting there
Will haunt them in their dreams.

Three years and months thou tarriedst to fight,
And holy war didst wage
In thine own person, nor didst thou some wight
As substitute engage.

Nor didst thou halt till God gave grace and aid
Unto His chosen crew,
Until with joyous victory the face
Of earth all radiant grew.

Thou didst appease, with foeman's life-blood spilled,
The thirsty sword and lance;
The hungry wolf and vulture, too, were filled
Where'er thou didst advance.

In India the influence of Muhammadanism has been scarcely more than superficial. Even at the present day an Indian Muslim, in his observances and tenets, is following several Hindu customs. The notion of ceremonial defilement if an Indian Muhammadan even eat out of a vessel which has been touched by Christian hands, is not anywhere sanctioned by Islam, the Koran itself expressly saying that 'the food of those who have received the Scriptures'—that is, Christians and Jews—is lawful for the true believer.

JAHAN. HIND., PERS. The world. Hence, Jahan-gir, world conqueror. Jahan-paiah, world protector, meaning 'your majesty.'

JAHANABAD, in the district of Sekooah, governed by a chief of the tribe of Sharegi, the most powerful in Seistan. Sharegi is so called from Shahrek, the residence of this chief's family, and one of the principal places in Seistan.—*Ferrier, Journ.* p. 415.

JAHAN-ARA BEGUM, Roushan-ara Begum, and Surya Begum were three daughters of Shah Jahan. They were all three women of beauty, talents, and accomplishments. Jahan-ara was devoted to prince Dara; Roushan-ara was devoted to Aurangzeb; Surya Begum, the third daughter, kept aloof from the family dissensions. Jahan-ara was in the prime of youth and beauty when her father was dethroned by Aurangzeb (June 1678); but she applied for leave to share his captivity, and continued to wait upon him till his death. Afterwards she was a bountiful benefactress to the poor and to religious men, and died with the reputation of a devout woman. On her tomb is the inscription, 'The perishable fakir Jahan-ara Begum, the daughter of Shah Jahan, and the

disciple of the holy men of Chishti, A.H. 1094 (A.D. 1682).—*Heber*, ii. 293; *Travels of a Hindu*, ii. 223.

JAHANDAR SHAH, emperor of Delhi, A.D. 1712-13, was the eldest son of Bahadur Shah, who died in February 1712. He defeated his younger brother Azim-us-Shan. Farokhsir, son of Azim-us-Shan, met and defeated him on the 1st January 1713, put him to death on the 4th February 1713, and ascended the throne.—*Elphinstone*, pp. 604-5.

JAHANGIR. Selim, eldest son of the emperor Akbar, succeeded his father as emperor of Delhi, October 1605, and assumed the title of Jahangir, world's conqueror. He early remedied some vexatious laws which had escaped Akbar's notice, forbade his officers opening bales of merchandise without the merchants' consent, abolished the punishments of cutting off ears and noses, forbade the use of wine, regulated the sale of opium, and he restored the Muhammadan creed on his coin, together with most of the forms of that religion. In March 1606, A.H. Zi Haj 1014, his eldest son Khusru fled from court towards Lahore, and, being defeated there, attempted to reach Kabul, but was seized and brought in chains before his father, and made to witness the agonies of 700 of his followers, whom Jahangir impaled in a line leading from the gate of Lahore. Jahangir expatiates in his Memoirs on the long duration of their agonies. Khusru was kept under surveillance till his death, which occurred in the Dekhan about A.D. 1621, while under the control of Prince Kurrum, afterwards Shah Jahan. In A.D. 1607 (A.H. 1016) Jahangir sent an army under Muhabbat Khan against the rana of Udaipur, and another army under Khan Khanan to effect a settlement of the Dekhan, but Malik Ambar, an Abyssinian, the Nizam Shahi and Adal Shahi dynasties, and the Mahrattas kept the imperial troops in continuous employ till the close of his reign, which saw the commencement of the rise of the Hindu race that at length put an end to the Moghul dynasty. In the sixth year of his reign (A.D. 1611, A.H. 1020) Jahangir married Nur Jahan, widow of Sher Afghan Khan. She was a high-spirited but artful woman; her name was put upon the coins along with that of her husband, the emperor took no step without consulting her, and in every affair in which she took an interest her will was law. Her father Ghais-ud-Din was made prime minister, and her brother Asaf Khan was placed in a high station. To her influence was due the great improvement in the conduct of Jahangir after the first few years of his reign; he was still capricious and tyrannical, but his barbarous cruelties were discontinued, and he drank only at night and in his private apartments. She was his constant attendant until his death, aiding him with her counsel, but also embroiling him with her intrigues in behalf of her own and husband's relatives. Jahangir had bestowed on Prince Kurrum the title of Shah Jahan, and declared him heir-apparent; and in October 1616 (Zi Kaida 1025) the emperor moved to Mandu to support the prince in his efforts to reduce the sovereigns of the Dekhan, in which he was entirely successful. Sir Thomas Roe, ambassador from James I. of England, accompanied him on the march, and speaks highly of the courtesy and hospitality of the nobles and the magnificence of the

court. But while Jahangir was in Kashmir in 1621 (A.H. 1030), the Dekhan again required Shah Jahan's presence, and while engaged there Nur Jahan used all her influence to secure the succession of her son-in-law Prince Shahriar, the youngest son of Jahangir, who had married her daughter by Sher Khan Afghan. Dissensions arose from this between Jahangir and Prince Shah Jahan, and the prince rebelled, A.D. 1623 (A.H. 1032), retreating at first to Mandu and afterwards by way of Telingana into Bengal (A.D. 1624), of which he obtained possession along with Behar, and then advanced towards Allahabad to oppose Prince Parviz and Muhabbat Khan. But he was overpowered, his army dispersed, and himself constrained once more to seek refuge in the Dekhan, where he united with Malik Ambar, but was deserted by his army, and, A.D. 1625 (A.H. 1034), he submitted to his father, and sent two of his sons, Dara Shekho and Aurangzeb, to court as hostages for his good behaviour. Nur Jahan induced Jahangir to order Muhabbat Khan to the court to answer charges of oppression and embezzlement during the time he had occupied Bengal. When he approached the camp, then on the Hydaspes, he was not permitted to see the emperor, on which he seized on the emperor's person, March 1626 (Jamadi-ul-Akhir A.H. 1035). Nur Jahan at first was separated, but shortly rejoined and released her husband, who marched back from Kabul to Lahore and then on to Kashmir. Jahangir while in Kashmir was attacked with asthma, and for change of air he was moving towards Lahore, but before he had got over a third of the journey he sank under the complaint, on the 28th October 1627 (A.H. 28 Safar 1037), and he was buried at the Shah Darra, 3 miles W. of Lahore, on the opposite bank of the Ravi. Shahriar made an unsuccessful effort to seize the throne, but Shah Jahan arrived from the Dekhan, and was proclaimed emperor at Agra on the 26th January 1628 (A.H. 7 Jamadi-ul-Akhir 1037). Jahangir's tomb is constructed entirely of marble, of fine workmanship, beneath which rests the body of the monarch. The tomb of his wife Nur Jahan has been ruined; precious stones were daily carried away by the restless Sikhs. Jahangir also married the sister of Raja Man, but the Rajputni princess early put an end to her life by swallowing poison, disgusted with the quarrels of her husband and son. His drinking-cup was formed out of a large ruby. A few years ago it had been placed for sale in one of the English jewellery shops at Calcutta by the ex-king of Lucknow. The cup had been scooped hollow out of an uncommonly large-sized ruby more than three inches long, by as many broad, in the fashion of a goblet, with the name of Jahangir inscribed upon it in golden characters. Side by side was placed also a similar but smaller cup, with a leg to stand on, which had belonged to the great Timur. The cup having passed into private property, its whereabouts cannot be any more traced. In his reign, Persian was the court language, but the people spoke Hindustani, and the emperor and some of his ministers spoke Turki. Jahangir's memoirs were written by several authors, and have several titles, amongst others the *Wakiat-i-Jahangiri* and *Dozdah Sala-i-Jahangiri*; and Jahangir himself seems to have written the 18 years of his reign, but ceased to

record on account of his age, and Muhammad Hdi continued it till the emperor's death. Jahangir wrote in Chaghtai Turki. The Imperial Gazetteer says that in his earlier years he had accepted the eclectic faith of his father. It is said that on his accession he had even permitted the divine honour paid to Akbar to be continued to himself. His first wife was a Hindu princess; figures of Christ and the Virgin Mary adorned his rosary; and two of his nephews embraced Christianity with his full approval. — *Elphinstone*, pp. 483–505; *Imp. Gaz.* iv.; *Mohun Lal's Travels*, p. 17; *Tr. Hind.* v. p. 460.

JAHHANGIR, a title of Pir Muhammad, grandson of Timur. He entered India in A.D. 1398 by way of Ghazni, and took Multan, and then rejoined the main army under Timur. Timur gave him the government of all his Indian conquests, and named him his universal heir, but six months after the death of Timur, in 1404, he was assassinated.

JAHHANNAM. ARAB., HIND., PERS. Hell, the Gehenna of Scripture. The Muhammadans recognise seven hells, — Jahannam for Muhammadan, Lazwa for Christians, Hutama for Jews, Sair for Sabæans, Sagar for Magi, Jalum for idolators, and Hawia for hypocrites.

JAHEZ, ARAB., or Mayndhi, HIND., a Muhammadan bride's trousseau, which is carried in procession to the bridegroom's house, consisting of clothes, garlands, dressing-cases, trinkets, and a number of articles of furniture. This is the dowry, and is the lady's property, descends to her children, and in case of her dying without issue belongs to her nearest of kin. The settlement made by the bridegroom is called the mahr. The mahr is a religious obligation, without which no marriage is lawful; as, however, the bride is allowed to remit an indefinite portion of it, it is more generally owed than paid. — *Burton's Scinde*.

JAHLIL. HIND. A lake, a morass.

JAHNAWI, the sacred thread of Hindus, and called Yagnopavita, also Zandiam. Second birth or twice-born are terms frequently met with in works on the Hindu people, and indicate that the person to whom it is applied has received the zonal or sacrificial cord. The artisan class of Sudras in Southern India, engaged in five avocations — viz. goldsmiths, Komsala; carpenters, Wodla; blacksmiths, Komala; coppersmiths, Komsagara; and stone-cutters, Sungtrash — all wear it. They are Sudras, and are divisions of the same race, for they intermarry. It is also worn by Brahmins, Kahatriyas, Chetties. See *Dwaita*; *Poita*; *Zandiam*; *Zonar*.

JAHN-NUGGUR is about four miles west of Nuddea, and below which the Ganges formerly held its course. Brahmaditila, in Jahn-nuggur, is a spot where human sacrifices were formerly offered to an image of Durga, and where a great mela is now annually held in July. One of the amusements in this mela is the Jhapan on the exhibition of the skill of snake-catchers and snake-charmers, and purchase of their antidotes. — *Tr. of Hind.*

JAHNU SAPTAMI, the seventh day of the month Vaisakh, when a festival is held in honour of Jahn, father of Jahnvi.

JAHEREJA, a Rajput clan who occupy parts of Cutch and Kattyawar, the different sections of

them who inhabit Hallaur and Mucha-Kanta are as under :—

Jam-zadah,	Kubhur.	Ummur.	Hapa.
descendants	Rewani.	Bharani.	Khumani.
of the Jam.	Weebani.	Bhanani.	Kana.
Hurdol.	Lakani.	Amrun.	Kno.
Doongurani.	Morani.	Dil.	Batach,
Sungeea.	Kunderya.	Halla.	etc.

The Jahreja were long notorious for killing their infant daughters. They obtained in marriage the daughters of any of the numerous races of Rajputs, and even found their facilities such as to allow of their being nice in selecting from the most respectable families. They were furnished with wives by the Jhalla, Wagela, Goil, Chura, Summa, Purmar, Surney, Soda, Jaitwa, Wala, and Wadal tribes; but there was a general preference in favour of the Jhalla. From the Jaitwa the Jahreja could not have obtained any wives for a long time, as it was more than a century since any grown-up daughters had been seen among them, female infanticide being prevalent among them. But in the early part of the 19th century, they, as well as the Jahreja among them, signed the instrument of abolition.—*Hindu Infanticide*, p. 38; *Par. Report*, pp. 161-169; *Cor-mack's Female Infanticide*, p. 108.

JAI or Jaya, also written Jye. SANSK. Victory; used as an exclamation, also preceding the name or title of a deity or person of rank, as Jai-Rama, Jai-Sita.—W.

JAI-CHAND, a Rahtor Rajput, the last Hindu sovereign of Kanouj. He was father of Sun-jogata. When the Chauhan Rajput Prithi-raj, the last of the Delhi kings, assumed empire by the sacrifice of the Aswa Medha, Jai-chand, to soothe his mortified vanity, celebrated the Raj shui sacrifice. It was for the last time performed by a Hindu prince, and all the Hindu sovereigns of India attended it, except raja Prithi-raj of Delhi and Samarsi of Mewar, whom Jai-chand represented by effigies of gold, assigning the post of porter to Prithi-raj, and that of scullion to Samarsi. It was at this that Jai-chand brought forward his daughter Sunjogata to select her husband, but she threw the Burmala over the neck of Prithi-raj, and in A.D. 1175 Prithi-raj carried her off to Delhi. In this successful rape he lost the flower of his followers, and his subsequent defeat by the Muhammadans has been partly attributed to this. Jai-chand, though thus bereaved of his daughter, sent her jahez or trousseau after her. Jai-chand closed his career by leaping into the Ganges at Ferozabad, the ancient Chandwar. The raja of Mandu in the Allahabad district is the direct descendant of Jai-chand.—*Report on the N.W. Provinces; Travels of a Hindu*. See Jye; Prithivi.

JAIDAD. PERS. Assets.

JAIESTH. On the sixth day of this Hindu month, about May and June, Hindu women hold a ceremonial festival, called Aranya Shashth (Forest-sixth), in which they walk in a wood. The ceremony is in the hope of obtaining handsome children.—*Wils*.

JAIESTH-ESWARA, a circular temple on the Takht-i-Sulaiman Hill in Kashmir.

JAILS.

Gaol, FR.	Carcere, Prigione, IT.
Gefdingniss, GER.	Carcel, SP.
Kaid-khana, HIND.	Zindan, TURK.

The native governments of India had no jails. Their punishments were immediate, and consisted of fine, branding, mutilation, or death. In the reign of Ranjit Singh there were not at any time 100 men in confinement in the Panjab, and the first sanction asked for, when it fell to British rule, was for jails to hold 10,000 prisoners. The general death ratio for the whole of India was nearly 74 per thousand in 1879-80; nearly one-twentieth of the prison inmates are constantly under medical treatment. Death-rate per 1000—

	1878.	1879.		1878.	1879.
Bombay, . . .	124	112	Madras, . . .	126	56
Panjab, . . .	109	103	Bengal, . . .	69	94
Central Pro-			Assam, . . .	61	98
vinces, . . .	119	70	N.W. Provinces, . . .	41	40

The death-rate per 1000 of all classes of prisoners in the jails of the Madras Presidency in the 23 years ending 1879 was—

1857-58, . . .	71.7	1865, . . .	129.4	1873, . . .	28.3
1858-59, . . .	73.8	1866-67, . . .	115.6	1874, . . .	26.8
1859-60, . . .	82.9	1867-68, . . .	42.4	1875, . . .	39.0
1860-61, . . .	67.4	1868-69, . . .	35.1	1876, . . .	42.4
1861-62, . . .	93.0	1869-70, . . .	39.0	1877, . . .	173.7
1862-63, . . .	89.4	1870, . . .	27.4	1878, . . .	125.6
1863-64, . . .	109.9	1871, . . .	18.4	1879, . . .	56.3
1864-65, . . .	127.0	1872, . . .	22.1		

In 1877, the famine year, as many as 3593 deaths occurred among 20,678 prisoners. The following table contrasts the statistics of the year 1880 with the three preceding years in the Madras jails :—

	1877.	1878.	1879.	1880.
No. in jail, . . .	14,242	24,088	19,621	12,443
No. admitted, . .	70,802	45,684	29,124	19,606
No. discharged, . .	60,958	50,161	36,302	20,506
No. remaining, . .	24,088	19,621	12,443	11,543
Daily average, . .	20,678	21,389	15,377	12,202

In British India, the average jail population in 1878 attained 127,914, and in 1882, 94,063. For the five years 1872-76 it had an average of 99,758. According to the census of 1881, for every 10,000 of population, 4.6 persons were in jail. In 1882 there was much sickness throughout the jail population, — 1213 admissions into hospital per 1000,—the death-rate standing at 39.96; the Bombay death-rate, 33.35 per 1000, and 42.56 and 42.62 for Bengal and Madras. In Bengal, bowel complaints gave rise to by far the largest mortality. The jails in the Central Provinces had a death-rate of 89.66 per mille, and those in Lower Bengal and Assam show 59.25 per mille. In Berar the death-rate for 1882 was only 8.5 per 1000. At Mymensing, in Lower Bengal, the ratio was 253.01 per 1000; at Raipur, in the Central Provinces, it was 205.56; and at Thayetmyo, in British Burma, 273.81.

JAIMINI was born at Dwaitavana. His father Shakatayana was author of a Sanskrit dictionary. Jaimini lived at Nilavata Mala, and while residing there he was described in the Skanda Purana as a short young man, of a light complexion, and wearing the dress of a mendicant. He founded the Mimansa school of philosophy. There are about 26 works extant illustrating the Mimansa system, but the Sutras of Jaimini are the best. Jaimini taught that the Vedas are uncreated, and are divine, and that God is to be worshipped only through the incantations of the Vedas, and through them emancipation and final absorption in Brahma. Jaimini's son Krita wrote verses in the Devi Bhagata.

Jaimini is, however, believed to be a historical literary name which must have been assumed by more than one Hindu author.

The Mimamsa Sūtras are attributed to a Jaimini, so is a Sakha of the Sama Veda; but the former refers to the latter, so they cannot possibly be of the same date. Again, there is a Grihya Sūtra attributed to a Jaimini, which is relatively late, and an astrological treatise of a quite recent date is attributed to a Jaimini.

JAIMINI, a celebrated author in the south of India, who lived about the 13th century, wrote a free translation from the Sanskrit of the Aswa Medha Parva of the Mahabharata, detailing the sacrifice of the horse. This work is acknowledged by all to be the finest specimen of Canarese poetry extant. 'He has read Jaimini' is a proverbial saying, equivalent to, He is an accomplished man.—Garrett.

JAIN or Jaina, a sect in British India which numbers 1,221,896. Their founder was a Hindu named Rishaba Deva. Their doctrines differ from Buddhism in this, that they recognise in the Jina Pati or Adi Buddha a divine personal ruler of all. They differ from Hindus in denying the divine origin and infallibility of the Vedas, and by their reverencing holy men whom they style Tirthankara, and also by their extreme, even ludicrous, tenderness of animal life.

The provinces of Mewar and Marwar became the cradle of their system, and there, as also in the Dekhan, they have many fine temples. They are to be found in most of the provinces of Upper India, in the cities along the Ganges, in Calcutta, Gujerat, in the northern part of the Malabar coast, and scattered throughout the Peninsula. The Jaina religion seems to have flourished for a time at Conjeeveram and Mysore, and appears to have there succeeded Buddhism, after its expulsion in the 7th century. But they have maintained their ground in Rajputana and in parts of Mysore, and followers of their creed hold in their hands a large part of the wealth and trade of India.

Sayana, in the Sarva darsanan graha, expounds the system of the Jaina sect. Their Angas constitute their true Veda. The Kalpa Sūtra of Bhadrā Bahu and Nawa Tatwa are two works illustrative of the Jaina religion and philosophy. The Yoga Sūtra gives a summary of its morals. The Digambara sect regard the Kalpa Sūtra as apocryphal. The Chatranjaya Mahatmya is a work of biography and legend.

Their leading religious tenets consist in a denial of the divine origin and infallibility of the Vedas; secondly, in the reverence of certain saints or holy mortals, who acquired by practices of self-denial and mortification a station superior to that of the gods; and thirdly, extreme and even ludicrous tenderness for animal life. The disregard of the Vedas and veneration of mortals are common to the Jain and Buddhist, and the former involves a neglect of the rites which they prescribe, but so far as the doctrines which they teach are conformable to Jain tenets, the Vedas are admitted and quoted as an authority. The Buddhists, although they admit that an endless number of earthly Buddhas have existed, confine their reverence to seven. But the Jain sect extend their number to twenty-four of their past age, twenty-four of their present, and twenty-four

of the age to come. The statues of these, either all or in part, are collected in their temples, sometimes of colossal dimensions, and usually of black or white marble.

Name.	Emblem.	Born.	Died.
1 Adinath or Vishnubha.	Bull.	Ayodhya.	Gujerat.
2 Ajitanatha.	Elephant.	"	Mt. Sikhar, Chodri Parianath.
3 Sambhunatha.	Horse.	Sawanta.	Mt. Sikhar.
4 Abhinandanatha.	Monkey.	Ayodhya.	"
5 Sumatinatha.	Chakwa or red goose.	"	"
6 Supadmanatha.	Lotus.	Kausambli.	"
7 Suparswanatha.	Swastika.	Benares.	"
8 Chandraprabha.	Crescent moon.	Chandripur.	"
9 Pushpadanta.	Crocodile.	Kakendrapur.	"
10 Sitalanatha.	Tree or flower.	Bhadalpur.	"
11 Sri Ansanatha.	Rhinoceros.	Sind.	"
12 Vasupadya.	Buffalo.	Champapuri.	Chanipapuri.
13 Vimalanatha.	Boar.	Kumtapapuri.	Mt. Sikhar.
14 Anantanatha.	Porcupine.	Ayodhya.	"
15 Dharmmanatha.	Thunderbolt.	Ratanpuri.	"
16 Santanatha.	Antelope.	Hastinapura.	"
17 Kuntanatha.	Goat.	"	"
18 Aranatha.	Fish.	"	"
19 Mallinatha.	Pinnacle.	Mithila.	"
20 Munisuvrata.	Tortoise.	Rajagrilia.	"
21 Naminatha.	Lotus with stalk.	Mithila.	"
22 Neminatha.	Shell.	Dwaraka.	Mt. Girmara.
23 Parswanatha.	Snake.	Benares.	Mt. Sikhar.
24 Vardhamana or Mahavira.	Lion.	Chitrakot.	Pawapuri.

Their Jinas or Tirthankaras have come to be regarded as veritable deities.

The saints held in highest esteem in Hindustan are Parswanatha and Mahavira, the twenty-third and twenty-fourth Jina of the present era. The generic names of a Jaina saint express the ideas entertained of his character by his votaries. He is Jagat prabhu, lord of the world; Kashina Karma, free from bodily or ceremonial acts; Sarvajna, omniscient; Adhiswara, supreme lord; Devadi Deva, god of gods; Tirthakara or Tirthankara, one who has crossed over Tiryati anena, that is, the world compared to the ocean; Kevali, the possessor of spiritual nature, free from its investing sources of error; Arhat, entitled to the homage of gods and men; Jina, the victor over all human passions and infirmities.

The last of the Jina was Mahavira, who was born of Trisala, wife of Siddhartha, of the family of Ikshvaku, and prince of Pavana, in Barataketra, and he married Yasodha, daughter of the prince of Samaravira. He afterwards became a Digambara or naked ascetic, and led in silence an erratic life for twelve years, and during his wanderings in this state he was repeatedly maltreated. He then commenced to lecture at Apapuri in Behar. His first disciples were Brahmans of Magada, and Indrabhuti or Gautama of the Brahman tribe of Gautama rishi, who is not identical with the Gautama of the Brahmans. Mahavira died B.C. 600, at the age of 72, of which 38 had been spent in religious duties.

According to the Jains, the vital principle is a real existence animating in distinct portions, distinct bodies, and condemned to suffer the consequences of its actions by migration. The reality of elementary matter is also asserted, as well as of gods, demons, heaven, and hell. All existence is divisible into two heads,—Life (Jiva), or the living and sentient principle; and Inertia, or

Ajiva, the various modifications of inanimate matter. Though the forms and conditions of these may change, as they are created they are imperishable. With them Dharma is virtue, and Adharma, vice. The Jain faith is supposed to be amongst the most recent of all the religious systems in India. Hema Chandra, one of their greatest writers, flourished in the end of the 12th century; and the compiler of the Jain Puranas of the Dekhan is said to have written at the end of the 9th century, and the Kalpa Sutra was not composed earlier than the 12th or 13th century. The Jain religion never extended itself into Bengal or Hindustan as a state religion, for two princes of Benares professed Buddhism up to the 11th century. In Western Marwar, and all the territory subject to the Chalukya princes of Gujerat, the Jain faith became that of the ruling dynasty about 1174, and Jain relics and followers are still abundant in Marwar, Gujerat, and the northern part of the Malabar coast. The Jain faith was introduced on the Coromandel coast in the 8th or 9th century, in the reign of Amogh-versha, king of Tonda Mandalam. Thus the 8th or 9th century seems to have been the earliest period of the existence of this religion there, and it was no doubt but an offshoot of the Buddhist faith, supposed by some to have been a branch of the Buddhists who escaped the fate of the orthodox followers of Gautama in the 8th and 9th centuries, by conforming somewhat to Brahmanism, and even helping to persecute the Buddhists. Hence many of the Jains acknowledge Siva, and in Mysore and other parts of Southern India they are even divided into castes.

In the reign of Himasitala, the Buddhist king of Conjeveram, about A.D. 800, the Jains and Buddhists entered on a strife for supremacy, in which the Buddhists were defeated; some were sentenced to be crushed to death in oil-mills, others fled to Ceylon. In the reign of Kuna Pandiyan of Madura, about the 10th century A.D., the Jains were in their turn overcome by the Saivas, headed by Sampantar. The Triuviliadal Puranam states that 8000 learned Jainas, rather than recant, 'with obstinate prejudice put themselves on the impaling stakes.'

The Jain are at present divided into the Digambara or Skyclad, i.e. naked, and Svetambara, i.e. the white-robed. The Digambara are also called Nirgrantha, without a bound, also Nangnatha, naked mendicants. They seem to have the greater claim to antiquity. All of the sect in the Dekhan and in Western India appear to be Digambara Jain. Indeed, the term Jain seems a new appellation, for in the early philosophical writings of the Hindus they are styled Digambara or Nanga, but in the present day the Digambara do not go naked except at meal time, but wear coloured garments. The Digambara assert that the women do never attain Nirvan, but the Svetambara admit the gentler sex to final annihilation.

There are clerical as well as lay Jains, the Yati or Jati, and the Sravaka, the former of whom lead a religious life, and subsist on the alms which the latter supply. The Yati are sometimes collected in mat'hs, called by them Pasala, and even when abroad in the world they acknowledge a sort of obedience to the head of the Pasala of which they were once members. The Yati never officiate as priests in the temples, the ceremonies

being conducted by a member of the orthodox priesthood, a Brahman duly trained for the purpose. They carry a brush to sweep the ground before they tread upon it, never eat nor drink in the dark, lest they should inadvertently swallow an insect, and sometimes wear a thin cloth over their mouths, lest their breath should inhale some of the atomic ephemera that frolic in the sunbeams. They wear their hair cut short, or plucked out from the roots. They profess continence and poverty, and pretend to observe frequent fasts, and exercise profound abstraction. Some of them are engaged in traffic, and others are proprietors of mat'hs and temples, and derive a comfortable support from the offerings presented by the secular votaries of Jina. The Jains of the south of India are divided into castes, but in Northern India they are of one caste, refuse to mix with Hindus, and recognise eighty-four orders amongst themselves, between whom no inter-marriages have taken place. This classification is called the Gachcha or Got, the family or race, which has been substituted for the Varna, the Jati, or caste. Secular Jains follow the usual professions of Hindus, but collect chiefly in towns, where, as merchants and bankers, they usually form a very opulent portion of the community. There are many in Murshidabad, Benares, and the Doab, but they are most numerous in Mewar and Marwar; numerous in Gujerat, Mysore, and in the upper part of the Malabar coast, and scattered throughout the Peninsula. They form a large division of the population of India, and, from their wealth and influence, a most important one. More than half of the mercantile wealth of India passes through the hands of the Jain laity. The chief magistrate and assessors of justice in Udaipur, and most of the towns of Rajasthan, were of this sect; and as their duties were confined to civil cases, they are as competent in these as they are the reverse in criminal cases, from their tenets forbidding the shedding of blood. To this leading feature in their religion they owe their political debasement; for Komarpal, the last king of Anhilwara of the Jain faith, would not march his armies in the rains, from the unavoidable sacrifice of animal life that must have ensued. The strict Jain does not even maintain a lamp during that season, lest it should attract moths to their destruction.

Mewar afforded a refuge to the followers of the Jain faith, which was the religion of Balabhi, the first capital of the rana's ancestors, and many monuments attest the support this family has granted to its professors in the vicissitudes of their fortunes.

Rajasthan and Saurashtra are the cradles of the Jain faith, and three out of their five sacred mounts, namely, Abu, Palitana, and Girnar, are in these countries. One of the best preserved monumental remains in India is a column in Chitore, most elaborately sculptured, full 70 feet in height, dedicated to Parswanatha. The noblest remains of sacred architecture, not in Mewar only, but throughout Western India, are Buddhist or Jain; and the many ancient cities where this religion was fostered have inscriptions which evince their prosperity in these countries, with whose history their own is interwoven, and to their having occupied a distinguished place in Rajput society; the libraries of Jeysumir in the desert, of Anhil-

wara, the cradle of their faith, of Cambay, and other places of minor importance, consist of thousands of volumes. These are under the control, not of the priests alone, but of communities of the most wealthy and respectable amongst the laity, and are preserved in the crypts of their temples, which precaution ensured their preservation, as well as that of the statues of their deified teachers, when the temples themselves were destroyed by the Muhammadan invaders, who paid more deference to the images of Buddha than to those of Siva or Vishnu.

The shrine in Hindu temples is always dark, and entered only by the single door in front; Jain temples, on the contrary, have very frequently several entrances. The patterns are very much alike, except in details, and consist chiefly of varieties and combinations of the figure called by the Jains Nandavarta,—a sort of complicated square fret,—the cognisance of the eighteenth Jaina.

The grouping together of their temples into what may be called 'cities of temples,' is a peculiarity which the Jains practise to a greater extent than the followers of any other religion in India. The Buddhists grouped their stupas and viharas near and round sacred spots, as at Sanchi, Manikyal, or in Peshawur and elsewhere; but they were scattered, and each was supposed to have a special meaning, or to mark some sacred spot. The Hindu also grouped their temples, as at Bhuvaneswar and Benares, in great numbers; but in all cases, so far as is known, because these were the centres of a population who believed in the gods to whom the temples were dedicated, and wanted them for the purposes of their worship. The Jains seem, almost more than any other sect, to have realized the idea that to build a temple, and to place an image in it, was in itself a highly meritorious act, wholly irrespective of its use to any of their co-religionists. This is a similar view to that held by their sister Buddhist creed.

Vasi, north of Dwaraka in Kattyawar, has a very ancient Jain temple. In S. Canara, at Karkala, there is a colossal Jaina statue; and Comateswara, a Jain figure of colossal size, is in front of a temple at Sravana Belgola.

The fragment of a little temple at Amwah, near Ajunta, shows it to have been a Jaina shrine of Sri Allat, the twelfth king mentioned in Tod's Rajasthan (i. p. 802).

Sonaghur, near Dutteah in Bundelkhand, and Muktagiri, near Gawilghur, in Berar, show the most modern styles of Jain architecture. Sonaghur is a granite hill covered with large loose masses of rock, among which stand 80 to 100 temples of various shapes and sizes. The sikra is rare, and the foliated pointed Muhammadan arch is the usual opening. Muktagiri is a deep romantic valley, and its largest group of temples are on a platform at the foot of a waterfall that thunders down from a height of 60 feet above them. The temples are only remarkable from showing their adoption of the Muhammadan style. At Dehli is a Jaina temple of much beauty. The background of the strut of its porch has pierced foliated tracery of the most exquisite device. At Khandagiri, near Cuttack, are Jaina caves, and there is one at Badami without any inscription. But there are three Brahmanical caves, one of which has the date 500 Saka (A.D. 579). The

Indra Subha and Jaganath Subha groups at Ellora are supposed to be of the same age as the Badami cave temple. At Ajmir the Arhai-din-ka Jompra has been described as a Jaina temple. So also is a great part of the mosque at the Kutub, Dehli.

Mr. Fergusson, however, tells us that the principal Jain works are in Rajputana, Gwalior, and Bundelkhand. Their sculptures almost entirely are restricted to the representation of their twenty-four hierarchs, whom they call Tirthankara, to each of whom, as mentioned at page 402, a symbol is attached,—generally some animal, fish, or flower; in one instance a crescent, in another a thunderbolt. Some of the Jaina temples are of great beauty. They have their shrines on the hills of Palitana, Girnar, Gwalior, Mount Abu, and Parasnath, but also in deep secluded valleys. That at Muktagiri, near Gawilghur, is in a deep, well-wooded valley, traversed by a stream with several waterfalls. At Sadri there is a group of temples, the principal one having been erected by Khumbo, rana of Udaipur, in a lonely silent glen, below his fort of Komulmer, dedicated to Adinath or Reshabdeva, the first and greatest of the Jaina saints. It covers 48,000 square feet. The rock at Gwalior, in Central India, has one remarkable Jaina structure, dedicated to Padmanatha, their sixth Tirthankara, and the rock on all sides has a series of caves or rock-cut sculptures, most of them mere niches to contain statues, all of them excavated between 1441 and 1474. One of the figures is 57 feet high. In their temples the saint is very numerously represented by images in cells or niches. At Chandravati, a few miles southward from Mount Abu, is a ruined city, with extensive remains of Jaina temples of the same age as those on the mount.

Jaina images are in Canara called Chindeo, a corruption of Jainadeva.

The Jain has been a builder of temples, has cut out cathedrals in the rock, and piled up towers and spires at his great places of pilgrimage for the last thousand years. Their temples are magnificent; the most ancient of them are at Girnar, the most exquisite on Mount Abu, the most extensive and still flourishing at Satrunjaya near Palitana. The last mentioned were beautified and restored by Siladitya, and it is the most ancient and most sacred of the Jain shrines of Gujerat. Almost every Indian city has contributed to its adornment. Palitana, or the abode of the Pali, is the name of the town at the foot of the sacred mount Satrunjaya (signifying victorious over the foe), the Jain temples on which are sacred to Budheswara, or the lord of the Buddhist. Palitana seems derived from the pastoral (Pali) Scythic invaders bringing in their train the Buddhist faith, which appears indigenous to India. Palestine, which, with the whole of Syria and Egypt, was ruled by the Ykos, or Shepherd Kings, who for a season expelled the old Coptic race, may have had a similar import to the Palitana founded by the Indo-Scythic Pali.

The hill of Satrunjaya at Palitana, in the Gohelwar district at the mouth of the Gulf of Cambay, is dedicated to Adinath, the first of the 24 hierophants of the Jains. Each temple contains images in marble of Adinath or of some other of the Tirthankara, and perhaps no fabric of

human workmanship in India is more calculated to arouse wonder, admiration, and lasting remembrance than Palitana in its unique and mysterious perfection.

Abu, in Jain estimation, is the holiest spot on earth. Dilwarra, according to tradition, has been famous from a remote antiquity. Hindu temples are said to have existed, to which, since A.D. 1034, pilgrims have resorted; but all traces of them have disappeared. On their traditional site, however, at Dilwarra, Bimul Sah, a rich Jain merchant, and others, erected the celebrated Jain temples which are now there. The Jain priests of Abu are chosen from amongst the youth of the Oasi tribe or Oswal of the Marwari people. They never marry, but live a sad'hu or pure ascetic life, and are scrupulously careful to avoid destruction of animal life. They move about with a cloth over their mouths to prevent insects entering; they use incessantly a small brush or broom to sweep aside all living creatures; they eat seldom, generally once daily, and they never partake of stale food, lest in the interval since its cooking animalculæ may have formed in it.

The ancient Persian fire-worshippers, like the present Jain, placed a bandage over the mouth while worshipping.

The Jains have five great tirthas, or places of pilgrimage, to which the large bands of pilgrims called Sanghas may be seen slowly marching every cold season. These places are Parasnath, near Calcutta; Mount Abu, the sanatorium of Rajputana; Chandragiri in the Himalaya; Girnar in Gujerat; and Satrunjaya in Kattyawar.

Parasnath is the highest point of the Bengal range of hills south of Rajmahal. It is one of the Jaina pilgrim shrines, and nineteen of their twenty-four Tirthankara are said to have died and been buried there; amongst others, Parswanatha, the last of them but one. The temples on it are numerous. But Jainism never seems to have taken a firm place in Bengal; and when the Pala dynasty of Bengal, about A.D. 1203, left Buddhism, and accepted the Vaishnava and Saiva superstitions, Jainism seems to have disappeared. There seems also to have been a pause, at least in the north of India; but a revival occurred in the 15th century, especially under Rana Khumbo of Mewar, A.D. 1418-1468, who made his capital at Chitore. Though deficient in the extreme grace and elegance that characterized the earliest examples, those of the middle style are bold and vigorous expressions of the art.

The temples on Parasnath are contemptible. But the number of pilgrims, men and women well-to-do in the world, who journey from very distant spots to Parasnath, is considerable. Slowly and toilsomely they may be seen climbing the hill, and presenting their offerings to the figures within the temple, marching thrice round the building with low and not unmelodious chant.

Of the five great places of pilgrimage, Satrunjaya is now the most popular. Like Parasnath, it is a solitary peak. It rises to a height of about 2000 feet, a little to the south of Palitana in Kattyawar. Leaving that town, the visitor passes along a broad and clear road, shaded by the banyan tree, and supplied by wells of pure water, the work of devotees. The steep ascent begins with a wide flight of steps guarded by elephants,

and is marked all the way up by miniature shrines covering marble slabs, on which the soles of two feet are carved, with Devanagiri inscriptions. There are frequent resting-places, considered especially holy, which are associated with events in the legends of Bharata and Krishna. The Hindus are represented by Hanuman, the monkey god, and the Muhammadans by the shrine of a saint, both marking the cessation of conflicts with the Jains. From the summit the view is magnificent. That a sect numbering less than half a million of people all over India should send forth so many pilgrims every year to the five tirthas, is explained by the fact that pilgrimage is an essential part of their worship,—is, indeed, the only means by which the devotee may attain to that complete annihilation, which, as distinguished from the Buddhist absorption, is the result of the breath, the only soul which they seem to believe in, leaving the body.

They have an extensive literature, Puranas of their own, works in grammar, astronomy, mathematics, and medicine. They were the first who reduced the Canarese language to writing, and cultivated it to a high degree of perfection. The best epic poem in the Tamil language, the *Chinta mani*, was by a Jaina.—*Barth*, p. 140; *Taylor's Catalogue*, iii. pp. 424-436.

JAINTIA, a tract of country in the province of Assam, divided into the Jaintia hills and the Jaintia plains. Indra Singh, the last raja of Jaintia, was a petty chief whose family had risen to importance amid the ruins of the Kachari kingdom at the close of the 18th century. Previously to the conquest of Assam, in 1824, the inhabitants of Jaintia were in the frequent habit of capturing British subjects in Sylhet, to offer up as sacrifices at the shrine of Kali. In 1832, two British subjects were passing along the high-road in Assam, when they were suddenly seized and carried up into the hills in the neighbourhood of Goba, in the Nowgong district. After having been decked out with new clothes and jewels, they were led away to be sacrificed, together with two other persons, also subjects of the British Government. One of the individuals, however, succeeded in making his escape, and on his return to the plains he gave information of what had occurred; and as no tidings were ever afterwards heard of the three other individuals, little doubt remained but that they were sacrificed. The chief had been frequently required to surrender the guilty individuals, but all to no purpose; and there being strong reason for believing that the chief had wilfully screened the perpetrators of this horrible crime, the Governor-General, Lord William Bentinck, in February 1835, confiscated all his territory situated in the plains. Dautipar consequently became annexed to the district of Nowgong, and these horrible atrocities were put a stop to. The raja voluntarily resigned the hill tract, and of this the British also took possession.

The Jaintia Hills are divided into 25 fiscal divisions, of which 3 are inhabited by Kuki or Lushai immigrants, and 1 by Mikirs. The remainder of the inhabitants are Syntengs, a race akin to the Khasiys, but reported to have distinct ethnical characteristics and a language of their own.—*Butler's Travels in Assam*, pp. 246, 247.

JAIPALA was raja of Lahore in the times of

Sabaktagin and his son Mahmud. He was defeated by Sabaktagin; and subsequently, at Peshawur, by Mahmud (Ismail?), who took him prisoner. On his release, he made over his kingdom to his son Anang Pal, and, mounting a pyre which he had ordered to be constructed, he set fire to it with his own hands, and perished in the flames.—*Elph.*

JAIPUR, Jayapuram, or Jeypore, a zamindari or tributary estate in Vizagapatam district, Madras, lying between lat. 17° 30' and 20° N., and long. 81° 20' and 84° 4' E. The population is chiefly Kandhs and Sauras.

JAIPUR or Jeypore, the capital of a Rajput State of the same name. It is the most beautiful of the towns of India, situated in lat. 26° 55' N., and long. 75° 52' E., and the State lies between lat. 25° 41' and 28° 27' N., and between long. 74° 55' and 77° 15' E.; area, 14,465 square miles. The military consist of 452 artillery, 4600 infantry, 5142 cavalry, and 4096 Nagha. Its ruler is the chief of the Kachhwaha tribe of Rajputs, and claims descent from Rama, king of Ayodhya in Oudh. Between Rama and Dhola Rao, who founded the Jaipur State in A.D. 967, thirty-four generations are said to have intervened. At the time of the foundation of Jaipur, Rajputana was under petty Rajput and Mina chiefs, owing allegiance to the great Tuar dynasty of Rajputs, who then reigned at Dehli. Dhola Rao and his Kachhwaha clan are said to have absorbed or driven out the petty chiefs, and to have founded a substantial dominion, known as Dhundal. Half a century later, the Kachhwaha chief Hamaji wrested Amber from the Mina, and this place remained the capital until 1728, when Jai Singh II. abandoned it for Jaipur.

The emperor Akbar, in the sixth year of his reign, when on a pilgrimage to Ajmir, honourably received at Sanganir, Bihari Lal, then chief of Jaipur, and married his daughter. Bihari Lal, with three of his sons, entered the emperor's service. One of these sons, Bhagwan Das, attained distinction as a governor and commander; and his adopted son Man Singh was one of the most conspicuous of the imperial generals. He fought in Orissa, Bengal, and Assam; and at a critical period, under great difficulties, he maintained his authority as governor of Kabul.

Jai Singh II., commonly known as Siwai Jai Singh, was remarkable for his scientific knowledge. He began to rule in A.D. 1699. He constructed observatories at Jaipur, Dehli, Benares, Muttra, and Ujjain, by which he was able to correct the astronomical tables of De la Hire, and to leave as a monument of his skill, lists of stars collected by himself, known as the 'Tij Muhammad Shahi,' or Tables of Muhammad Shah, the then emperor of Dehli, in whose favour Jai Singh stood high. He laid out and built the present Jaipur (Jeypore) in A.D. 1728. At a later period, the rajas of Jaipur united with Udaipur (Oodeypore) and Jodhpur to resist the Muhammadan power. And, to regain the honour of intermarriage with the Udaipur family, which his family had lost by giving a princess to the Moghul emperor, the raja of Jaipur consented that the issue of a Udaipur princess should succeed in preference to an elder son by other wives. This attempt to set aside the right of primogeniture brought great disasters both on Jaipur and

Jodhpur. Subsequently, at the beginning of the 19th century (1809), the Jaipur ruler was mixed up with a very horrible deed, to Krishna Kumari. The maharana of Udaipur had only one daughter, and the rajas of Jaipur and Jodhpur fought for her hand. The rana was helpless to decide between the two candidates, and the whole country was convulsed by the struggle, for nearly all the chiefs of Rajputana took a part in the war. The Mahrattas and Afghans saw their opportunity, and the progress of their armies through Rajputana was to be traced by blazing villages and ruined harvests. The rana implored the British Government for protection. Even the rival princes of Jaipur and Jodhpur joined in the solicitation. But public opinion in England was opposed to all such intervention. A word would have restored peace to Rajputana, but the British Government declined to interfere. Accordingly, the rana was obliged to purchase the protection of Amir Khan, the Afghan, by the cession of a large territory, and was then compelled by the Afghan to poison his own daughter to put an end to the war. The young Rajput princess accepted her doom, said, 'This is the marriage foredoomed for me,' and drank the opium; but the tragedy filled Western India with shame and horror.

The political relations of the British Government with Jaipur commenced in 1803, when Juggut Singh was then its maharaja; in 1818 he ended a life which had been spent in the grossest debauchery, and regretted by no one. But on the 25th April 1819, a posthumous son was born by one of the rana's, and he was recognised as heir, both by the Jaipur nobles and the British Government. Till the rani's death in 1833, Jaipur was a scene of corruption and misgovernment. The young maharaja, Jai Singh, died in 1835, leaving a young son, Ram Singh, then under two years of age, and the agent to the Governor-General then proceeded to Jaipur, reformed the administration, and assumed the guardianship of the infant heir. The agent's life was attempted, and his assistant was murdered. The larger portion of the Sambur lake belongs to Jaipur, and the salt manufactured from it yields 4 lakhs. Babra, three marches from Jaipur, on the road to Dehli, has one of the edicts of Asoka engraved on a block of stone or rock, on a hill, in old Pali, and of date B.C. 309. It is in the oldest Lat character. It differs somewhat in style and language from the pillar and rock edicts. The subject is the Buddhist commandment forbidding the sacrifice of four-footed animals. The Vedas are alluded to, but not named, and are condemned as mean and false in their doctrine, and not to be obeyed. The Jaipur artisans produce translucent enamels, that is, enamel colours painted on gold, or gold-leaf, which gives light and splendour to the colours.—*Treaties, Engagements, and Sunnuds*, iv. p. 29; *Beng. As. Soc. Jo.* ix. p. 617; *Malcolm's Tr.*; *R. As. Soc. i.* p. 69. See Rajput.

JAIS, a Rajput tribe of the Solar branch, residing principally about Muttra.

JAISALMIR or Jeysulmir is the capital of the Rajput State of the same name, situated in a broad belt of low rocky ridges, lat. 26° 55' N., and long. 70° 57' E. It was founded in the year 1156 by Rawal Jaisal; Elphinstone says A.D. 720. The State lies between lat. 26° 5' and 28° 23' N., and between long. 62° 29' and 77° 15' E. It is

almost entirely a sandy waste, forming part of what is called the 'Great Indian Desert.' A well, 32 miles south-east of the capital, is 490 feet deep. Rain-water is used for drinking purposes. The majority of the inhabitants are Yadu Bhatti Rajputs, who claim a very ancient lineage. The ruler of Jaisalmir is styled Maharawal, and holds his position as head of the Bhatti clan. The Maharawal has a force consisting of 651 infantry.

The castle of Jaisalmir is erected on an almost insulated peak, from 200 to 250 feet in height, a strong wall running round the crest of the hill. It has four gates, but very few cannon mounted.

Jaisalmir is separated on the north from Bahawalpur by the Great Desert, and is the modern name of the ancient Marusthal, the Desert of India. It is termed Mer in the traditional nomenclature of this region, from being a rocky (mer) oasis in the heart of the sandy desert. The greater part of Jaisalmir is thul or rue, both terms meaning a desert waste. From Lower, on the Jodhpur frontier, to Kharra, the remote angle touching Sind, the country may be described as a continuous tract of arid sand, frequently rising into lofty tiba (sand-hills), in some parts covered with low jungle. This line, which nearly bisects Jaisalmir, is also the line of demarcation of positive sterility and comparative cultivation. To the north is one uniform and naked waste; to the south are ridges of rock termed muggro, rue, and light soil. There is not a running stream throughout Jaisalmir; but there are many temporary lakes or salt marshes, termed sirr, formed by the collection of waters from the sand-hills, which are easily dammed in to prevent escape. The sirr last but a few months, though after a very severe monsoon they have been known to remain throughout the year. The Kanoad sirr extends from Kanoad to Mohungurh, covering a space of 18 miles, and in it some water remains throughout the year. When it overflows, a small stream issues from the sirr, and pursues an easterly direction for 30 miles before it is absorbed. The salt which it produces is the property of the crown, and adds something to the revenue. The country still dependent on the Rawal extends between lat. 26° 20' and 27° 50' N., and long. 70° 30' and 72° 30' E., though a small strip protrudes in the N.E. angle, as high as 28° 30'. The Yadu of Jaisalmir, who ruled Zabulistan, and founded Ghazni, claim the Chaghtai as of their own Indu stock,—a claim which Colonel Tod deems worthy of credit. The first chief with whom the British Government entered into political relations was Maha Rawal Mulraj, who succeeded to power in 1762. In 1818, a treaty was concluded with Mulraj by which the State was guaranteed to his posterity, the chief was to be protected from serious invasions and dangers to his State, provided the cause of quarrel was not ascribable to him, and was to act in subordinate co-operation to the British Government. No tribute was demanded from him. During the lifetime of Mulraj, who died in 1820, the State was virtually governed by his minister, Salim Singh, who put to death nearly all the relatives of the chief. The town of Jaisalmir was depopulated by his cruelty, the trade of the country was interrupted, and the relatives of the Maha Rawal who escaped death fled from the country. In 1844, after the con-

quest of Sind, the forts of Shagur, Gurscen, and Guttura, which had been wrested from Jaisalmir, were restored to that State. The forts were given over by Mir Ali Morad, by order of the British Government. In 1846, the widow of Guj Singh adopted Ranjit Singh, who, in 1862, received a formal sunnud guaranteeing the right of adoption; he receives a salute of fifteen guns. The area of Jaisalmir is 12,252 square miles, the population about 73,700, and the revenues Rs. 5,00,000. The military force of the State does not exceed a thousand men.

Copper mines are in the neighbourhood of Khetri, but, owing to the want of proper appliances for keeping down the water, the richest veins, which are lowest, cannot be reached.—*Tod's Rajasthan*, ii. p. 284; *Treaties*, etc.

JAISHTHA. SANSK. The second month of the Hindu solar year, when the sun is in the sign Vrisha 8, answering to the Tamil month Viassei.

JAI SINGH II., the royal historian and astronomer of Amber, connects the line with Sumitra, the fifty-sixth descendant from the deified Rama, who appears to have been the contemporary of Vikramaditya, A.C. 56. From his love of science, he was one of the most remarkable persons of his nation. He was appointed by the emperor of Delhi to be viceroy of Malwa, but in public life he was not distinguished for firmness or decision, and in A.D. 1734 he surrendered Malwa to the Marhattas with the tacit concurrence of the emperor, on whose behalf the territory was still to be held. But, in 1736, Baji Rao claimed as jaghir the province of Malwa and all the country south of the Chambal, together with the holy cities of Muttra, Allahabad, and Benares.—*Elph.* p. 626. See Jaipur.

JAISWAR, a tribe of inferior Yaduvansi Rajputs of the Central Doab. Jaiswara, Jaiswara, or Juswar, subdivisions of low-caste tribes, originally from Jais, in Oudh.

JAITWA, Jetwa, or Camari, an ancient tribe, and by all authorities styled Rajput, though, like the Jhala, little known out of Saurashtra, to one of the divisions of which it has given its name, Jaitwa. Its present possessions are on the western coast of the Peninsula. The residence of its prince, who is styled rana, is Porbandar. In remote times, their capital was Gunthi, whose ruins attest considerable power, and afford singular scope for analogy, in architectural device, with the style termed Saxon of Europe. The bards of the Jaitwa run through a long list of 130 crowned heads, and in the 8th century have chronicled the marriage of their prince with the Tuar re-founder of Delhi.—*Tod's Rajasthan*, i. p. 113.

JAJMAN, in N. India, a person to whose services Brahmans, barbers, bari, and others have a prescriptive right. The village jajman must be fed, whether employed or not.

JAJU, near the ford of the river Bunganga, is generally called Jaju Sarai; near it the battle was fought between Bahadur Shah, son and successor of Aurangzeb, and his brother the prince Muhammad A'zam.—*Cal. Rev.*, Jan. 1871.

JA'K'HAN. HIND. The wooden foundation of the brickwork of a well. It is generally made of the green wood of the gular tree (*Ficus glomerata*), which is less liable to rot than any other kind.—*Elliot, Supp. Gloss.*

JAKO, mountain peak in the Simla district

of the Panjab, overhanging the station of Simla, lat. $31^{\circ} 5' N.$, and long. $77^{\circ} 15' E.$ The ridge, upon which stands the sanatorium and summer capital, culminates eastward in this noble height, 8000 feet above sea-level, and 1000 feet above the general elevation of the houses.—*Imp. Gaz.*

JAKUN. The wild tribes inhabiting the Malayan Peninsula, Sumatra, and a few of the neighbouring islands are divided into three principal classes, which are subdivided into many clans. The first of these divisions includes the Bhatta, who inhabit the interior of Sumatra and a few neighbouring islands. The second is that of the Semang, who are found in the forests of Kodah, Tringanu, Perak, and Salangor. The third division, the Jakun, comprise many tribes, who inhabit the south part of the Peninsula, from about Salangor on the west coast and Kemaman on the east coast, and extend nearly as far as Singapore. All these various wild tribes are ordinarily classed under the general and expressive appellation of Orang Binua, meaning people of the soil. The Malays, in the 13th century, had but a short time inhabited the Peninsula, since we are informed by the *Sejara Malaya* that Singapore is celebrated in Malayan history as having been the first place of settlement of the early Malay emigrants from Sumatra. In course of time the early Arab trading vessels brought over priests from Arabia, who made a number of converts to Muhammadanism, and those of the Orang Binua who declined to abjure the customs of their forefathers, in consequence of the persecutions to which they were exposed, fled to the fastnesses of the interior, where they have since continued in a savage state. The principal localities of the Jakun are at the upper extremity of the rivers of Johore, Banut, Batu Pahat, and Muar. Those of Malacca are generally as tall as the common run of Europeans; they are darker than any other of the wild tribes; and in which respect there is not much difference between them and the darker of the Indo-Portuguese of Malacca. The Jakun of Johore are a fine race of men; many of them are taller than those of Malacca; the face also is expressive and well characterized, and the expression of the eyes in many of them is a little severe. Their nose does not recede at the upper part, neither is it so flat or so broad at its base as this organ is in the Chinese, Cochin-Chinese, and pure Malay. Several of them have aquiline noses. Some children and young men are beautiful. The women are plump, but not over stout. The Jakun of Menangkabau State are very short, their physiognomy is low, and seems to indicate great simplicity; many of them are ugly and badly made. A Jakun has always his spear, which is both a stick to walk with and an offensive or defensive weapon. The parang, an iron blade of about 1 foot long and 2 or 3 inches broad, with a haft like that of a large knife, they use to cut trees. Their marriages are ordinarily celebrated about the month of July and August, when fruits are plentiful. Amongst some tribes there is a dance, in the midst of which the bride elect darts off into the forest, followed by the bridegroom. A chase ensues, during which, should the youth fall down or return unsuccessful, he is met with the jeers and merriment of the whole party, and the match is declared off.

Adultery is punishable by death. It is not allowed to keep more than one wife. A man can divorce his wife and take another. In several tribes, children, so soon as born, are carried to the nearest rivulet, where they are washed, then brought back to the house, where a fire is kindled, incense of kamunian wood thrown upon it, and the child then passed over it several times. The practice of passing children over fire was in all times much practised among ancient heathen nations; and it is even now followed in China and other places. When death occurs, the sumpitan, quiver of arrows, knife, etc., of the deceased are buried with him, along with some rice, water, and tobacco. They are candid and honest, extremely proud, and will not submit for any length of time to servile offices, or to much control. Each tribe is under an elder, chief, or leader, termed the Batin, who directs its movements, and settles disputes. The Jakun hate the Malay, and the Malay despise the Jakun.

JAL. HIND. Water. Jüli dhan, a rice crop sown in marshy ground. Jalkar sair, revenue obtained from water. Jal, a Hindu water ordeal, in which the accused is dipped under water whilst an arrow is shot and a person runs and brings it. If, on his return, the accused be still alive, he is deemed innocent. Jala-Charaniya, any caste from whose hands a Hindu would drink water.

JALAGARA. KARN. A caste who sweep the streets, sift or wash refuse in search of lost money or valuables. ^cJalagada-guwar, sifters of goldsmiths' furnaces.

JALAL. ARAB., HIND., PERS. Splendour; the dread attribute of the Almighty. See Sufi.

JALALABAD, a small town in Afghanistan on the bank of the Kābul river, in a rich country between Peshawur and Kabul. It is in lat. $34^{\circ} 24' N.$, and long. $70^{\circ} 26' E.$ It is 100 miles from Kābul, with about 300 houses of Hindus, Tajak, Ahwan, and Afghans. It is on the high-road from Peshawur to Kābul, and 1946 feet above the sea. Sir Robert Sale occupied it on the 13th November 1841, and held it to the 7th April 1842, when the garrison was relieved by General Pollock.

Jalalabad was long the residence of a chief of the Barakzai family, who had a revenue of about seven lakhs of rupees a year. The Safed Koh or Rajyal, on its south, attains a height of 15,000 feet; and about 30 miles on its north is the famous Nurgil; on the N.W. the lofty peaks of the Hindu Kush appear.

Earthquakes are repeatedly felt at Kabul. Vigne tells us (*Pers. Narrat.* p. 212) there are usually a dozen in the course of a year. While the British were besieged at Jalalabad, in 1841, its walls were thrown down by an earthquake. The prevailing rock is gneiss.—*MacGregor*, p. 401; *Burnes' Tr.* i. 23; *Mohun Lal's Tr.* p. 348.

JALALABAD, a name given by Akbar to the town of Arail on the banks of the Jumna, after his own title of Jalal-ud-Din. By a public edict, he abolished the salutation of 'Salam Alaikum,' substituting 'Allaho Akbar,' and the reply of 'Jal-i-Jalaliho;' in both of which are parts of his name, Jalal-ud-Din Muhammad Akbar. The Sipah Salar was ordered to see that the same exclamations were made at meals; and the aftabi, the rupee, and several other coins of his

reign, as well as his seal, bore the inscription, Allaho Akbar, Jal-i-Jalalibo. There are several instances of Arail being mentioned prior to Akbar's time. In the *Tarikh-i-Budaoni* it is stated that the pargana of Arail was, in A.H. 977, before the composition of the *Ayin-i-Akhari*, given in jaghir to raja Ram Chund.—*Elliot's Suppl. Gloss.* See Nagarahara.

JALALI, a sect of fakirs or darvesh, who look on Syed Jalal Bokhari as their founder. He married two daughters of Syed Badr-ud-Din.

JALALPUR, an agricultural village, in lat. 32° 39' 30" N., and long. 73° 27' E., close to the right bank of the Jhelum river. The village has been identified by General Cunningham with the site of the ancient Bucephala, built by Alexander the Great in memory of his charger, which was killed in the battle with Porus at the crossing of the Jhelum. Amusing Porus by marching and counter-marching his troops along the banks of the river, as if searching for a ford, on the arrival of the boats, he passed the river at Jalalpur, 114 miles from Attock, where it is, in the rainy season, upwards of a mile broad and never fordable. In the battle which ensued, Porus was defeated and taken prisoner. It was at this part of the Hydaspes, on its right or western bank, that the conqueror, in commemoration of this event, built the cities of Nicæa and Bucephala. Remains of ancient walls still crown the summit of the hills, which rise to a height of 1000 feet above the village. Coins found among the ruins date back to the period of the Græco-Bactrian kings. Even in the time of Akbar the town covered a site four times as large as that which it now occupies; but since the foundation of Pind Dadan Khan, and the shifting of the river channel two miles eastward, it has undergone a constant decay.—*Imp. Gaz.*

JALAL-ud-DIN, son and successor of Sultan Muhammad, king of Kharasm. On the advance of the hosts of Chengiz Khan, he defended his country gallantly to the last. He gained a victory near Kandahar, and another still farther to the east, but these successes did not even retard his ruin. His last battle was near Bannu, in A.D. 1221, on the Indus, where, after displaying the most obstinate valour, and witnessing the total destruction of his army, he swam the river with seven followers amidst a shower of arrows from his enemies, whom he left in admiration of his intrepidity. In the course of the night and next day, he was joined by 120 of his soldiers, and before many days had passed he had assembled 4000 horse; but on the Moghuls threatening to cross the Indus, he fled towards Delhi, and applied to Altamsh for aid or an asylum. To this he received only a courteous answer; and, after a chequered career, finding the Moghuls withdrawn from Persia, he re-established his power in that country, opposed them with vigour in a new invasion, but was killed at last, in A.D. 1231, in Mesopotamia, ten years after his passage of the Indus.—*Elph.* p. 321.

JALAL-ud-DIN, one of the most celebrated of the Persian Sufi poets. He was a descendant of Abubakr, the khalif who succeeded Mahomed, and was born at Balkh about the beginning of the 13th century A.D. He finally settled at Koniah (Iconium), where he died A.D. 1273. He was a Sufi, a pupil of Shams-i-Tabriz, and instituted the

Maulani sect of darvesh. He is usually honoured with the appellation Maulana, i.e. my lord. His poem, *Masnavi*, is in Persian, and consists of six books. He introduced the flute as a musical instrument in public worship. Ghulam Kadar Ghilani, 50 years before, had introduced the tambourine. Jalal defended the innovation by saying that the Romans might be converted by the aid of sweet sounds. The Maulani darvesh are excellent flute players. His *Masnavi*, or 'rhyming couplets,' as the name signifies, is a complete exposition of Sufi doctrines, illustrated with numberless tales, apologues, and scraps of history. It is more highly esteemed by the Shiah sect than perhaps any other work. The complete work consists of six books, containing 26,660 couplets, to which some authorities add a doubtful seventh book, to make up the number of the 'seven planets,' the 'seven zones,' and the 'seven heavens.' It is very unequal in merit,—grand and noble thoughts, exquisite language and imagery, and apposite illustrations being mixed up with much that is dull, commonplace, and stupid. The poem opens with some lines in praise of the reed-flute, Jalal-ud-Din having sanctioned the introduction of music and song as an accompaniment to the religious exercises of his followers. The reed is made to sigh for its separation from its home amid the rushes by the river-side, and the plaintive notes which it utters are said to be in unison with absent lovers' passionate moods because of this inherent sympathy. The *Masnavi* has been translated by Mr. J. W. Redhouse. It not only contains a full exposition of the tenets of that mystical creed which has preserved alive the ancient Aryan religious philosophy down to the present day under the guise of a Muslim esoteric doctrine, but it is a perfect mine of old-world stories, traditions, and striking sayings. The whole of the folk-lore of ancient Persia is, as it were, poured out into these pages, the tales and legends being used as pegs upon which to hang moral reflections, or brought in to illustrate some mystic dogma. He early adopted a life of literary and religious retirement, and founded a darvesh order and college at Iconium. His followers were called after him Maulaviyah, and are the same as those known to European travellers as the Dancing Darveshes, from the symbolical dance, or rather waltz, with which they commence their services.

JALAL-ud-DIN MUHAMMAD AKBAR, grandson of Baber, and 7th in descent from Timur, was the eldest son of the emperor Humayun and of his wife Hamida Banu Begum. He was born at Amerkot, in the valley of the Indus, on the 14th October 1542. See Akbar.

JALA-MURTTI, SANSK., whose form is water, a name of Siva.

JALANDHAR, a revenue division in the Panjab, comprising the three districts of Jalandhar, Hoshiarpur, and Kangra, in lat. 30° 56' 30" to 32° 59' N., and long. 75° 6' 30" to 77° 49' 15" E. The royal family of Jalandhar and Kangra is one of the oldest in India, and trace their genealogy from the time of the founder, Susarma Chandra. The scions of this house claim to be of Sonavansi descent, and they assert that their ancestors held the district of Multan, and fought in the Great War on the side of Duryodhana against the five Pandu brothers. Since the occupation of the

plains by the Muhammadans, the ancient kingdom of Jalandhar has been confined almost entirely to its hill territories, which were generally known by the name of Kangra, after its most celebrated fortress. The district is also called Katoch, also Trigartta, which is its Sanskrit name in the Puranas and in the chronicle of Kashmir. It is mentioned by Ptolemy as Kulindrine or Ktulindrine. The British district is occupied by Jat, following Hinduism and the Sikh religion, with Rajputs, Brahmans, Banya, Gujar, Kamboh, Pathans, and Sayyid. The higher portion of the Jalandhar is a tract abounding in mineral wells, where the icy stream of the Parbati is close to the boiling fountain of Munnikarn, which rises in a jet at an elevation of 5587 feet. Some are reported to contain iodine or bromine. In this district, also, and on the banks of the Beas, is Bishiht, at an elevation of 6681 feet, with a thermal sulphuretted source. In the neighbourhood of Mundinuggur, in the Bul-Doon or valley of Sukeyt Mundi, in the Kohistan of Jalandhar, the women, gaily dressed, used to assemble in groups to greet the stranger with songs as he entered each village, for which honour he was expected to bestow a rupee on each knot. It was at Jalandhar where Hindus say the breasts of the corpse of Sita fell.—*As. Res.* vi. p. 477; *Rennell*; *Cunningham*.

JALANGI, one of the three great rivers of the Nadiya district, Bengal; the other two being the Bhagirathi and the Matabhanga. All three streams are offshoots of the Padma.

JALARUPA, the makara or fish on the banner of Kama, the Hindu god of love.

JALAUN, a British district in the North-Western Provinces, lying between lat. 25° 46' and 26° 26' N.; and between long. 78° 59' and 79° 35' E., with an area of 1553 square miles, and a population of Brahmans, who hold as many as 198 villages; Kurmi, with 107; Gujars, with 105; Kachhwaha, with 84; Sengar, 62; Kayasth, 50; and Muhammadans, 34.—*Imp. Gaz.*

JALIKAT. TAM. A sport in Madura in the south of India. It consists in loosing, either from a large pen or from a number of stakes to which they are tied, a lot of cattle with cloths or handkerchiefs tied to their horns, money being sometimes knotted in the cloths. When let go, the spectators shout and cheer, and a tremendous tom-toming is set up. This so far excites the animals that most of them go off at a gallop, and such of the spectators as wish to distinguish themselves in the eyes of their countrymen as swift runners and brave men, go after the cattle and strive to pull the cloths off the beasts' horns, the cloth and any valuable attached to it being the reward of the captor. This may be considered the national amusement of the people of Madura. It was practised at Trichinopoly, Pudukottah, in parts of Tanjore, and was as much their passion as horse-racing is that of the people of England, or bull-baiting that of the people of Spain. The rich ryots, zamindars, and headmen are the great promoters of this kind of sport, by running their own cattle, etc. Directly they find that its practice is attended with danger of being tried for an accident, it is probable that they will voluntarily withdraw from actively continuing it, when it will greatly lose its interest and excitement among the people, and they will then pro-

bably voluntarily give it up and take to or invent some more harmless amusement. Since the year 1855, a prohibition has existed against the sport being indulged in, and in 1859 certain village servants were dismissed by the presiding magistrate for permitting it within the limits of their jurisdiction.—*Orme*.

JALKAR. HIND. Fowler, hunter; from Jal, a net. Jal-kar, from Jul, water, is a fisherman. Jal-kar and Ban-kar, products of the waters and woods; Jaliya is the right of fishing, from Jul, water. Jali, a net fabric.

JALLAD. ARAB. An executioner.

JALLALI, a masked or mumming devotee at the Maharram. The Jallali mummerys adopt fancy dresses, sing Marsiah, satires, and songs. The great bulk of them are low-caste Hindus and Pariahs.

JALMOR, from Balti, a dark, hard, serpentine-like stone, takes a fine polish. It is used like zahr-mohra for cutting into cups, etc. The value of a cup is from Rs. 3 to 4.

JALNA (Jaulnah), in lat. 19° 51' N., and long. 75° 54' E., in the Dekhan, a military station, 98 miles E. of Aurangabad, 1652 feet above the sea.

JALOTSARG. HIND. A Hindu ceremony where a pond or well is married to a neighbouring grove. The typical marriage of a newly-dug well or piece of water, the bridegroom being typified by a man holding a salagram fossil, and the bride by another person holding another of that fossil. Banotsarg and Jalotsarg are peculiar marriage ceremonies of Hindus in Northern India. The Jalotsarg is that of marrying a newly-planted orchard to a neighbouring well, without which it would be deemed improper to partake of the fruit. Brikhotsarg is the marriage ceremony performed in the name of the bull (saur-taurus), which the Hindus of N. India liberate on the 11th day of mourning for a near relative. In N. India these are known as the saur (taurus) bijar, and the British call them Brahmany bulls.

JALPAIGURI, the north-eastern district of the Rajshahi Koch-Bahar division, lies between lat. 26° 0' 35' and 26° 59' 30" N., and between long. 88° 22' 40" and 89° 55' 20" E., occupying the tract south of Bhutan and north of the state of Koch-Bahar and the Rangpur district. The Western Dwar became British territory as the result of the war with Bhutan in 1864-65. The newly-acquired territory was formed into the Eastern and Western Dwar. The great bulk of the population belongs to the Koch or Rajbansi. The headquarters of this race are in Koch-Bahar; but Koch, Rajbansi, or Pali are thickly scattered through all Northern Bengal, from Assam to the frontier of Purnia.—*Imp. Gaz.*

JALSA. ARAB., HIND., PERS. An assembly, a meeting of men on business or pleasure; also the assembly or reception room. In an upper-storey house, the Jalsa is usually on the ground floor.

JALTARANG, a set of musical glasses or rather bowls.

JAL-TURPUN. HIND. Presenting water to the gods and manes; part of a Hindu's daily devotions.

JALUS. ARAB. Literally accession; the term applied to the ascent of a throne. In the Southern Konkan the Jalus San or San-i-Jalus has formed

an era commencing with the year of Salivahana 1578 (A.D. 1656), and running on henceforward in the ordinary solar manner. It corresponds exactly with the accession of Sultan Ali Adl Shah II. to the throne of Bijapur.—*Thomas' Prinsep*.

JALWA. HIND. The first meeting of the Muhammadan bride and bridegroom after marriage in the presence of relatives, when certain ceremonies are performed.

JAM, a Hindu title, supposed by Colonel Tod to be a corruption of Sambu, a titular appellation from the Sambu of Alexandria. It is, however, a Hindu title borne by the Jam of Bela, the Jam of Nowanagar in Saurashtra, the Jam of Kej, also the Jam of the nomade Muhammadan Jokya, a Samma tribe, west of Tatta, and has no connection with Jamshid, nor has it a Persian origin.—*Elliot; Burnes' Cabool*.

JAMA, an article of Muhammadan dress, an outer coat.

JAMA. ARAB. A place where Muhammadan people assemble to pray, a house of public worship; also an amount, a total.

JAMA. ARAB, HIND. The revenue payable by a cultivator or a zamindar. Jamabandi, the village rent-roll, a statement of the rents fixed on every field in the township; the annual settlement of the rents between landlord and tenant, the collection of the revenue. The word has numerous combinations. Jama-Kharch, receipts and disbursements; account current.

JAMADAGNI, son of Bhṛigu, was father of Parasa Rama by his wife Gandara. He wrote a law treatise and a book on religious ceremonies. He taught that God is visible and assumes every variety of form. He is mentioned in the Sri Bhagavata, the Ramayana, the Ekamra, the Nandikeswara, and the Padma Purana.—*Ward*, iv. p. 43.

JAMADAR, the chief or leader of any number of persons, also a native commissioned officer in the native armies of India.

JAMAI (Waziri), an embroidered white scarf worn by young women of the Waziri.

JAMAL-ud-DIN ABDUR RAZAQ, born at Samarcand, A.D. 1413, was the son of Kazi Shah Ruh, who, in 1441, sent Jamal-ud-Din as ambassador to the king of Vijayanagar, afterwards as ambassador to Ghilan, and then to Egypt. See Shah Rukh.

JAMA MUSJID is the principal mosque in Indian towns in which Muhammadans meet for prayer and religious services. The Jama Musjid of Delhi cost ten lakhs of rupees, and took six years in its construction. It was begun and completed in the reign of Shah Jahan. Three of the highest, the broadest, and finest flights of steps in Delhi, made of stone, lead to the front and side entrance, whence the spectator comes to a square platform. In the centre of this is a large cistern, which is intended for the performance of the 'wazu,' or ablutions before prayer. While the three sides open inwardly with a corridor and cloisters, the west of the square platform is the cathedral itself, rising in three large domes and two of the most stately minarets within the town of Delhi. Its space admits of a vast congregation, and on the anniversary of a saint of any celebrity, or on any other particular occasion, it is crowded with Muhammadans.—*Tour in India by French*, p. 10.

JAMAWAR. HIND. A shawl fabric with a pattern in stripes, intended, as its name implies, for a gown piece or jama.

JAMBEE, a cane with stiff stems and large knots, imported from China; a species of calamus.

JAMBHA DATTA, author of the Vetala Panchavinsati.

JAMBHAJI, a Hindu who founded the religious sect known in the Delhi district as the Bishno. They regard Jambhaji as an incarnation of Vishnu; they bury their dead in a sitting position in the floors of their houses or cattle-sheds. They abstain from tobacco, and consider even its touch polluting. At their marriages, passages from the Koran and the Hindu Shastras are indiscriminately recited.

JAMBIA. HIND. A dagger.

JAMBOSA AQUEA. D.C.

Eugenia aqua, W. III. | *E. sylvestris*, Moon.
Jambo, BENG. | Wal-jambo, . . SINGH.

Abundant in the Central Province of Ceylon up to an elevation of 5000 feet.—*Thw. Zeyl*.

JAMBOSA CYLINDRICA. *Thwaites*.

Eugenia cylindrica, W. | *E. pauciflora*, W. Ic.

A moderate-sized tree of the Ambagamowa district in Ceylon, up to an elevation of 3000 feet.—*Thw. Zeyl*, ii. p. 115.

JAMBOSA SALICIFOLIA. *Gibson*. Pau jambool, MAHR. A crooked tree growing much on the rivers of the Bombay Dekhan country. The stem is generally useless for house purposes, on account of its crookedness, but the straight shoots are eagerly sought after as rafters.—*Dr. Gibson*.

JAMBU - DWIPA. SANSK. In the Hindu cosmogony, one of the seven grand divisions of the earth, including Asia, and so named from the tree called Jambu abounding in it. Modern commentators, however, allege that it refers only to certain parts of the interior of Asia. In this sense Jambu-Dwipa is the central division of the world. India is so called in the Puranas. The golden mountain Meru is the centre of the mythical Jambu-Dwipa. Geographically, Jambu-Dwipa is the name given by the Indian Aryas to all the mountain region on the N.W. of India, including the ancient Indian province of Afghanistan. The basin of the Indus, which was earlier occupied by the Sudras (Cushites or Caucasians), they called Kouca-Dwipa. It had nine varsha or subdivisions, —Bharata, Kim-purusha, Kin-nara, Hari-varsha, Ila-vrita, which contains Meru; Ranyaka Hiran-maya, Uttaru-kuru, Bhadraswa, and Ketu-mala.

JAMBUKESWARAM, a famous temple, 400 years old, on Srirangam Island, Trichinopoly, Madras, lat. 10° 51' N., and long. 78° 44' E.

JAMBULGHATA, a town in the Chanda district, Central Provinces, lat. 20° 33' N., and long. 79° 30' E. Extensive quarries of soapstone are at a mile from the village, and have been worked over a hundred years; about 50 cart-loads are annually quarried and fashioned into bowls and platters. Near these quarries are others of a very fine black serpentine, where for three years Raghoji III. employed 250 workmen.—*Imp. Gaz.*

JAMDANI. HIND. Silk fabric with woven sprigs of flowers.

JAMES. Commodore James commanded the E.I. Company's Marine Force in India. In 1755, in alliance with the Mahrattas, he sailed from Bombay, to attack the strongholds of Angria, and on the

2d April, unaided by the Mahrattas, he took Severndrug and Goa. Bancote surrendered on the 8th April, and in February 1756 he attacked Gheriah.

Colonel Henry James, R.E., author of General Description of the Country of Abyssinia and of the different Routes leading into it.

JAMES AND MARY, a dangerous shoal in the Hoogly. It is an English corruption of the Hindustani words *Jahaz marra*, a ship struck; also, it is said, of two Bengal words, *Jumma marri*, confused water. Shifting and dangerous alluvial deposits formed in the channel of the Hoogly by the meeting of the backwater of the Rupnarayan with the discharge of the Damodar, both of which last-named rivers enter the Hoogly at sharp angles from the west, nearly opposite Falta. Lat. $22^{\circ} 13'$ to $22^{\circ} 17' N.$, and long. $88^{\circ} 5' 45''$ to $88^{\circ} 7' 30'' E.$ —*Imp. Gaz. v.*

JAMESON. Deputy Surg.-Gen. W. Jameson, C.I.E., formerly Superintendent of Botanical Gardens in the North-West Provinces, died at Dehra Doon on March 13. Three years after his arrival in the country, in 1841, he was sent to report on the geology of the Himalayas with a view to the discovery of the cause of the floods on the Indus. While on this expedition he was captured by the frontier tribes, and kept a prisoner until he was ransomed by the Government, who afterwards appointed him Superintendent of the Botanical Gardens in these provinces. Dr. Jameson devoted his energies to the introduction of tea cultivation into the North-West and Panjab. On his retirement in 1875, Government placed on record the opinion that but for Dr. Jameson's exertions this great and important industry would have had no existence in Northern India.

JAMI, the literary title of Maulana Nur-ud-Din Abdur Rahman, who was born at Jam, a small village near Herat, A.H. 817, A.D. 1401. He devoted his life to study and dissemination of the mystic doctrines of Sufi philosophy, for which, towards the end of his life, he abandoned all other occupations. He was unequalled as a grammarian, a theologian, and a poet. The Rubaiyat of Omar Khayyam, and the Salāmān and Absāl of Jami correspond in time with western mediævalism, ranging from the latter part of the 11th to about the middle of the 15th century. The earlier of the two poets represented, Omar of Naishapur, in Khorasan, is said to have been a tent-maker. At all events, his *takhallus*, or poetical name, Khayyam, taken literally, signifies as much. Nur-ud-Din Abdur Rahman, who took the name of Jami from his birthplace, a little town of Khorasan, came into the world more than 300 years after Omar Khayyam; but there is no such apparent chronological difference between Jami's mystical poems and the Rubaiyat, or stanzas, of Omar, as we should expect to find. The philosophy, half-sad, half-merry, of both these poets is as forward an element of their verse as is the fertile imagination which they share by community of race.

JAMI-ut-TUARIKH. This comprehensive history was written by Fazl ullah Rashid, otherwise Rashid-ud-Din, son of Imad-ud-Daulah. Abul Khair was born at Hamadan about A.H. 645, A.D. 1247. Jami-ut-Tuarikh contains a detailed account of some important events and periods of history. It commences with the usual traditional Muhammadan account of the patriarchs

and prophets, a history of the kings of Persia from Kayumars to Yezdejird, and a sketch of the life of Mahomed, of his immediate successors, and of the Ommaiyah and Abbassi khalifs of Baghdad. After this, those of the houses of Mahmud-ibn-Sabaktagin, the conqueror of Ghazni, the Seljukian and Khwarazmian Sultans, and of the Salghuri dynasty in Fars. This is followed by a history of the Ismaili. It is divided into two parts, the first treating of the Alawi khalifs of Egypt and Africa. The second deals with the Ismaili themselves, and especially that section of them who, under the rule of Hasan-us-Sabbah, were known as the Assassins, and gained such unenviable notoriety during the Crusades. The next section of the Jami-ut-Tuarikh deals with the history of Ughuz, the legendary head of the Turks, the founder of their world-wide empire, and the progenitor of the Sabaktagin, Seljuki, and Turkoman Sultans. The history of China is also here appropriately introduced, and ends with its final conquest by Uktai Khan in A.H. 631. The volume next contains a general review of the history of India, and a special account of the Moghul sovereigns, prefaced by an account of the origin of the Turkish races themselves. This part contains a minute account of Chengiz Khan, his ancestors, family, character, and history. The careers of Uktai Khan and of the other celebrated Tartar conquerors, including Kublai Khan, Timur, and Hulaku, are also described, and tables given of the contemporary sovereigns in various parts of the east, from A.H. 549 to 693. Rashid-ud-Din began this book A.H. 700, by order of Ghazan, and completed it in ten years. In A.H. 718 he was put to death by Sultan Abu Sadi, having been accused of poisoning Oiljaitu.

JAMMA, in Coorg, feudal tenure of land, for which the tenant pays a small rent and gives military service. Such land cannot be mortgaged or alienated.

JAMMA ALLAH. ARAB. God's assembly.

JAMMADI-ul-AWAL, the fifth month of the Muhammadan year. Jammadi-ul-Akhir is the sixth month, also styled Jamadi-us-Sani.

JAMMALI, the amiable attributes of the deity.

JAMMA MASJID, the great mosque in the towns of India, where the Friday assemblies take place. Those of Delhi, Agra, Madras, Hyderabad, are of great dimensions. See Jama Masjid.

JAMMU, a province and town in Kashmir State, Panjab. Estimated population, about 8000. Situated in lat. $32^{\circ} 43' 52'' N.$, and long. $74^{\circ} 54' 14'' E.$, on the Johi, a tributary of the Chenab. The town of Jammu is 1500 feet above the sea, and the bed of the Chenab is a little above 1000 feet. The boundary mountains of Jammu rise 12,000 to 14,000 feet. Jammu is the capital of a principality of which the rulers are Dogra Rajputs. The town contains 7000 or 8000 people. It is built on the summit of the first wooded sloping ridge that rises from the plains of the Panjab, and on the right bank, at the place where it is divided by a narrow ravine which allows an exit to the river Ravi? in its way to its junction with the Chenab.

General Cunningham (Ancient Geog. p. 133) gives the following as the States attached to the Jammu division of the Alpine Panjab, viz.:

2 Hindu States, viz.—

Jammu, to east of Chenab. | Bhau.

9 Muhammadan States, viz.—

Rekasi, on Chenab.	Khariali, near Bhimbar.
Aknur.	Kashtwar, on Upper
Punach, on the Punach.	Panjab.
Rajaori, on the Tochi.	Bhadwar, to south of
Kotali, on the Punach.	Kashtwar.
Bhimbar, at foot of hills.	

8 Hindu States, viz.—

Chanem, to west of Bhadrarwar.	Jasrota, to S. of Bandralta.
Bandralta, to S. of Chanem.	Tirikot, near Jasrota.
Samba, to S.W. of Bandralta.	Mankot, to S. of Bandralta.
	Badwal or Vaidiwas.
	Ballawar or Bisohli.

General Cunningham also gives (p. 136) the names of 12 States attached to the Jalandhar division of the Alpine Panjab, viz. :—

5 Somavansi, viz.—

Kangra or Katoch.	Datarpur.
Guler.	Siba.
Jaswal.	

2 Surajvansi, viz.—

Chamba, on Ravi.	Kullu, on Beas.
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5 Pundir or Pandaya, viz.—

Mandi, on Mid Beas.	Kotila, to E. of Nurpur.
Sukhet, to S. of Mandi.	Kotlehar.
Nurpur, between Ravi and Beas.	

Also (p. 131) the 13 States attached to Kashmir or the western division of the Alpine Panjab, viz. :—

1 Kashmir.

4 Khala Bamba, viz.—

Gingal, on the Behat.	Khagan, on the Kumhar.
Muzaffarabad.	Gathi.

5 Muhammadan, viz.—

Rash, on Pakhli river.	Darband, on the Indus.
Dhanteshwar, on Dor.	Torbela.
Gundgarh.	

3 Gakkar, viz.—

Pharawala, near Behat.	Khanpur, on Haro.
Sultanpur, on Behat.	

— *Vigne; Schl.; Cunningham, Ancient India.*

JAMNOTRI, a mountain in the Himalaya, in lat. 30° 59' N., and long. 78° 35' E., in Garhwal, on the left bank of the Jumna, about 8 miles N. of Kharsali. The hot spring Bassu Tarta and the level of the Jumna there is 9793 feet above the sea. The springs occur on the sides of a massive mountain block, known as Banderpunch, with an elevation of 20,758 feet above sea-level. In the centre stands a lake, in which the monkey-god Hanuman is said to have extinguished his flaming tail. The water rushes up through a granite rock, and deposits a chalybeate sediment. It has a temperature of 194.7° Fahr. Elevation of the springs, 10,849 feet above the sea.—*Rob.; Schl.; Imp. Gaz.*

JAMRUD, ruined fort in Peshawur district, Panjab, situated in lat. 34° N., and long. 71° 24' E., at the mouth of the Khaibar (Khyber) pass.—*Imp. Gaz.*

JAMRUH or **Jamrat**. ARAB. Arite at the Kaba, in Mecca, in which pilgrims throw stones, as if at the devil. It originated from Abraham throwing stones at the ram sent to take the place of his son.

JAMSAN. HIND. A kind of earth containing an alkali; useful in alum manufacture.

JAMSETJEE JEJEEBHoy, a benevolent Parsee of Bombay, who rose to great wealth by commerce. He founded schools and hospitals, and endowed charitable institutions. His private bounties were great, and he sought every opportunity for doing good. On the 3d March 1842, the Queen of Great Britain created him a baronet of the United Kingdom. He was born at Bombay 15th July 1783, and died there 14th April 1859.

His public benefactions amounted to upwards of £200,000.

JAMSHID. The fifth king of the Peshdadian dynasty of Persia, who, according to Bailey, flourished 3209 years before the Christian era. The Shah Namah describes him as the first to civilise mankind, and Persian writers consider the bas-reliefs at the ruins of Persepolis—still visible in all their pristine beauty after a lapse of 5000 years—to be representations of the court of Jamshid, more especially on the festival of the Nouroz. The celebrated Persian poet Firdusi wrote the Shah Namah about A.D. 1000, containing three heroes, Jamshid, Faridun, and Garshasp, as the three earliest representatives of the generations of mankind. A little way from the gate of the entrance of Toos, there stands a dome ornamented with lacquered tiles, so small as seemingly to form a part of some private house; this dome covers the dust of this celebrated poet, who, after the unworthy treatment he received from Shah Mahmud Ghaznavi, retired there to die, A.D. 1020.—*Fraser's Khorasan*, p. 510.

JAMSHIDI or **Djamshidi**, a nomade tribe of Persian origin, who have inhabited the valley of the Murghab river from time immemorial. Their habits resemble those of the Turkoman, living in tents, and are equally predatory. Allah Kuli Khan conquered them and the Turkoman Sariks, their allies, and he removed the Jamshidi to Khiya. They remained on the banks of the Oxus for about 12 years, when, availing themselves of a general rising of the Turkomans, they marched across the desert by Hazarasp, Charjui, and Maimena to their hereditary lands on the Murghab. Jamshidi are the only tribe of Eastern Indians who are exclusively nomades. They derive their descent from Jamshid, and moved out of Segistan to the shores of the Murghab, which they have occupied from pre-historic times. They live in the neighbourhood of the Salor and Sarik Turkoman, and they use the round conical tent of the Tartars, surrounding it with felt and a reed matting, and their clothing and food are those of Turkoman, as also is their occupation, for they are as great man-stealers. They excel the other Aimak as horsemen, and for a chapao band themselves with men of Herat or with the tribes of Turkomans. It was this cause that led Allah Kuli Khan to transport them from Khiya to the banks of the Oxus, after he had conquered them with the allied Sariks. After a residence of 12 years, they fled and returned to the town of Murghab. The Jamshidi is polite in word and manner. They still retain parts of the Zoroastrian faith, reverence fire, pitch their tent-door to the east.—*Central Asia, Collett.* See Iranian.

JAMUNA, a river of Assam, rising in lat. 26° 31' N., and long. 93° 31' E., in the north of the Naga Hills. It falls into the Kapili river.

JAMUNA, **Jamuna**, or **Jannai** is the name given to the lower section of the Brahmaputra in Northern Bengal, from its entrance into the plains to its confluence with the Ganges.

JAN. In India, the Jan, the Gin of the Arabian Nights, is only known amongst the Muhammadans. In Sind, the Jan resembles the Pwacca or Puck of Britain. The Jan of the Baluch Hills is wayward and often morose, but not necessarily malignant. He is described as dwarfish, with large eyes, and covered with long hairs, and often

changes to the form of a camel, goat, or other animal. On meeting a Jan, it is essential not to be alarmed, and to use civil language. The Jan can become the servant of man and work hard. The evil ones are devils whose chief is Ibles (that is Satan, the devil); in general properties they are an intermediate class between angels and men. They eat and drink, and are subject to death, etc. Many of the superstitions respecting them form part of the religion of Muhammadans, being sanctioned by the Koran.—*Burton*.

JAN. HIND., PERS. Life, soul, spirit; hence Jandar, brave, spirited. Janwar, animal.

JANAB. HIND. A respectful form of address to Muhammadans, Hindus, and Europeans; it is the equivalent of 'highness.'

JANAKA, king of Vaideha and father of Sita, a wise, good, and devout man, who, with his priest Yajna-walkya, prepared the way for Sakya Sinha. He refused to acknowledge the hierarchical pretensions of the Brahmans, and claimed the right of performing sacrifices independent of priests. In the time of Buddha, and for many centuries afterwards, the people of Vaisali were called Lichhavi; and in the Trikandasesha, the names of Lichhavi, Vaideha, and Tirabhukti are given as synonymous. Vaideha is well known to the readers of the Ramayana as a common name of Mithila, the country of raja Janaka, whose daughter Sita is also named Vaideha. Tirabhukti is the present Tirahuti or Tirhut. Now the modern town of Janakpur, in the Mithari district, is acknowledged by the universal consent of the natives of the country to be the same place as the ancient Janakpur, the capital of Mithila. The correct rendering of the name is doubtful; but if the bearing and distance recorded by the Chinese pilgrims are correct, it is almost certain that the capital of Vriji in the seventh century must have been at Janakpur. Hiwen Thsang gives the name of the country in its Sanskrit form as Foli-shi, or Vriji; but it is also stated that the people of the north called the country San-fa-shi.—*Dowson; Cunningham*.

JANAKHORI, the tribes in the small valley of Janakhwar in the Hasan Khel, Adam Khel, Afridi Hills, with two subdivisions, Tutkai and Barkai, and can turn out 1500 fighting men. They afforded shelter to men fleeing from justice. The Afridi of Janakhwar are the best of the Afridi, bold and intrepid in action.—*H. A. N. W. F. P. i. pp. 35, 36*.

JANAM. TEL. Birth. Purva Janam, a former birth. Janam Patri, a Hindu horoscope at birth, literally birth-tablet, it being indispensable to every Hindu child, being at once his horoscope and the guide throughout life.—*Burton's Scinde, p. 399*.

JANAM ASHTAMI, the nativity of Krishna, held as a festival on the 8th day of the month Bhadra. It is also called Gokal Ashtami, and is a Hindu festival in commemoration of the birth of Krishna, an event which is said to have taken place at Muttra, at midnight, on the 8th of Shravan, about the 22d August. One Vaishnava sect keeps the holiday Janam on the 8th and another on the 9th of Shravan. Krishna is stated to have been born of Devaki, niece of Kansa, king of Muttra. Kansa having had it predicted that one of his race would destroy him, he endeavoured to compass the death of Devaki's offspring, in

which he failed, and on the 9th, Krishna was removed to the house of a cowherd named Nanda. The worshippers abstain during the day from certain articles of diet; at night they bathe and ornament the image, and offer the tulsi, or Ocimum sanctum. On the following day, a Brahman serves as pujari, and afterwards he himself is worshipped. The 8th day is held by the Gaoli or cowherd race as a great jubilee day; from the circumstance of Krishna having been reared by one of their people, they join hands and dance, and shout Govinda, Govinda. The shrines of Kanoba are much visited at night; the Bhagat of the shrine, by self-flagellation, becomes hysterical, which is deemed by the people to be a possession by the deity, on which they prostrate themselves, burn incense, and present sick people to the Bhagat. On the following day, the Bhagat's disciples work themselves into hysterics.—*Bombay Gazetteer*.

JANAMEJAYA, a great king, son of Parikshit, and great-grandson of Arjuna. Parikshi died from the bite of a serpent, supposed to indicate his death in war against the Naga people of Takhasila, and Janamejaya is said to have sacrificed many serpents (Nagas), hence his title Sarpa-sattrin.—*Dowson*.

JANAMI. MALEAL. A hereditary land proprietor.

JANAM SAKHI, a legendary biography of Nanak.—*Cust*.

JANEO. HIND.

Janwez, Jandum, . MAHR. | Yajno pavita, SANSK.

This cord or string falls over the left shoulder to the right hip. It is worn by the Brahman, Kahatriya, and Vaisya castes, by the Ved or Bed of Bengal, and in the Dekhan by the five artificer castes.—*Wilson's Gloss*. See Yajana; Zonar.

JANGAMA, the priest of the Lingaet sect, who officiates at their religious rites. Where the population of a village consists in any large proportion of his disciples, he is a member of the establishment, and holds rent-free or inam lands,—thence known as Jangama Inam. He is sometimes domesticated in mat'hs or monasteries, and otherwise is a vagrant living on alms. The doctrines of this sect, as given forth in the 12th century by Basava, their founder, are based on the physiological philosophy of reproduction. They honour Siva under his symbol the lingam, and oppose the Tantrica doctrine of reverencing the Yoni, the symbol of Durga. See Lingaet.

JANGATA. TEL. The Satana, Jhera, and Dhasra are three mendicant sections of religious devotees of the Hindus. The Satana keep a god, Permaloo, the image of an incarnation of Vishnu, in their houses, and worship it daily. They perambulate the streets morning and evening, and accept alms from all but the lowest castes. They often demand alms, threatening otherwise to burn themselves with a lamp or torch. The Dhasra play on the Jangata, Tarti, and Sincu, and hold an iron worshipping lamp in their hands. They walk before the corpse when it is carried to the funeral pile.

JANGLI. HIND. A term applied to wild plants, grains, etc., as opposed to cultivated; also to any low forested country, and to any rude, unpolished person.

JANG TANG. BHOJ. Uncultivated pasture lands; the uplands of Tibet.

